# The Construction Equipment Industry in EUROPE

**Company Profile** 

# **CNH GLOBAL**

December 2010



# **A Subscription Service**



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# Company Profile CNH Global

# Europe

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### **INTRODUCTION**

This report, as part of the European Service, analyses the worldwide activities and performance of the CNH agricultural and construction machinery divisions, with an emphasis on production, sales and distribution of construction equipment and agricultural tractors in Western Europe. It must be stressed, however, that its European activities form only one area of interest. CNH is present in approximately 170 countries worldwide.

Information in this profile is based on CNH's published material and on interviews with CNH management carried out by Off-Highway Research in late 2010.

CNH Global NV (CNH) was formed in November 1999 through the merger of New Holland and Case Corporation. The company is incorporated in the Netherlands and is controlled by Fiat Netherlands Holding NV, a wholly owned subsidiary of Fiat SpA, which owns approximately 89 per cent of the outstanding common shares of CNH.

CNH has three business sectors with combined total revenues of \$13.8 billion in 2009:

- Agricultural Equipment
- Construction Equipment
- Financial Services

CNH is a leading global manufacturer of agricultural tractors and combine harvesters, the fifth largest producer of construction equipment and has one of the industry's largest equipment finance operations. The company is organised globally with separate brand-driven commercial organisations and distribution networks. It has a network of 11,600 dealers in approximately 170 countries, including more than 3,500 construction equipment dealers. CNH agricultural products are mainly sold in Europe under the brand names of Case IH, New Holland and Steyr. Construction equipment is sold in Europe under the brand names of Case Construction Equipment and New Holland Construction.

#### **BRIEF HISTORY OF CNH**

The companies which have come to form CNH have a long and varied history. Some of the more important milestones are described below. The history of the construction equipment goes back more than 125 years.

1842	The Case Company brought out its first product from a small shop in Racine, Wisconsin, the						
	Ground Hog thresher.						
1895	Abe Zimmerman opened the New Holland Machine Shop, in New Holland Pennsylvania, USA.						
1010.	In 1903 this became the New Holland Machine Company.						
1912:	Case entered the construction equipment business with graders and steam rollers.						
1957:	<b>Case</b> introduced the 320 loader/backhoe, the first ever complete backhoe loader available under a single manufacturer's warranty. Production of crawler dozers introduced at the Burlington,						
1)5/.	Iowa plant.						
1968:	Case bought Drott and started to supply hydraulic excavators, cranes and straddle carriers.						
	Fiat founded Fiat MMT (Fiat Construction Machinery Division), opening the Lecce plant in						
1970:	southern Italy and took over SIMIT, an Italian producer of hydraulic excavators.						
1971:	Fiat established a new plant in Belo Horizonte, Brazil.						
1974:	Fiat and Allis-Chalmers join their construction equipment activities into Fiat-Allis BV.						
1977:	Case acquired Poclain, the French manufacturer of hydraulic excavators.						
1985:	Fiat Group acquired full control of Fiatallis.						
	Fiatallis signed a manufacturing agreement involving hydraulic excavators with Hitachi						
1986:	Construction Machinery of Japan and formed a new company Fiat-Hitachi Excavators SpA with						
	a new plant in San Mauro, Italy.						
	Fiat acquired the Italian excavator manufacturer Benati and later merged it with Fiat-Hitachi.						
1991:	Fiat acquired the agricultural and construction activities of Ford New Holland and merged them						
	with its farm machinery and construction equipment interests to form <b>NH Geotech</b> .						
1996:	Case purchased Fermec, the British backhoe loader and mini excavator manufacturer. New						
	Holland went public on the NYSE.						
1997:	New Holland established agreement with <b>Manitou</b> to develop and manufacture telescopic handlers under the New Holland brand name.						
	Case Corporation and <b>Sumitomo Construction Machinery</b> signed a global alliance to						
	manufacture and market hydraulic excavators.Case acquired 50 per cent of LBX, created from						
1998:	the excavator activities of Link-Belt, a joint venture company previously partly owned by						
1770.	Sumitomo.New Holland acquired majority shares in O&K, excluding its mixing equipment.						
	O&K sold its mining equipment business to Terex.						
	New Holland merged with Case Corporation to form CNH Global NV.Case established a joint						
1999:	venture in India with Larsen and Toubro (L&T) to manufacture backhoe loaders and						
	compaction equipment.						
2000:	As a result of a directive from the European Commission, CNH sold Fermec International to						
	Terex Corporation.						
	CNH Global and Kobelco Construction Machinery announced an agreement to form a global						
2001:	alliance for the marketing, development and production of mini and crawler excavators						
	worldwide. In addition, the alliance includes distribution of CNH construction equipment in						
	Japan and the Asia Pacific region. The European regional alliance between CNH and Hitachi Construction Machinery Company						
	was terminated. Subsequently a new company, <b>Fiat Kobelco Machinery</b> , was formed with						
	ownership divided between CNH (75 per cent), Kobelco Construction Machinery of Japan						
2002:	(20 per cent) and Sumitomo Corporation (five per cent). A new range of construction equipment						
	type telescopic handlers manufactured at the CNH Lecce plant was introduced under the New						
	Holland and Fiat Kobelco brand names.						
2003:	New Fiat Kobelco hydraulic excavator models from the Evolution Series, based on Kobelco's						
	latest technology, were produced at the San Mauro plant in Italy.First models of Fiat Kobelco						
	mini excavators, based on Kobelco's latest technology, were assembled at the new extension to						
	the Imola plant.						
2005:	Consolidation and downsizing of manufacturing facilities led to worldwide reduction of						
	manufacturing plants from 60 to 39. The global brand New Holland Construction was created,						
2006-	incorporating the Fiat Kobelco and O&K brands.						
2006:	Production of wheeled excavators and compact wheeled loaders was moved from the Berlin plant to Italy.						
2010:	Case sold its 50 per cent interest in LBX to Sumitomo Construction Machinery.						
2010.	- Case sold is so per cell interest in EDA to summonio construction Machinery.						

The farm machinery interests, formed from a number of entities, have an even longer history.

1842:	Jerome Increase Case founded the Racine Thrashing Machine Works in Wisconsin,					
	USA to make a stationary thresher.					
1848:	Cyrus McCormick founded the McCormick Harvesting Machine Co. in Chicago, USA,					
10	based on reapers developed by him and his father.					
1875:	Alexandre Braud began making stationary threshers in France.					
1906:	Leon Claeys started building threshing machines.					
1907:	Ford came out with the prototype for the world's first mass produced, gasoline					
1017.	powered tractor, named an 'automobile plow'.					
1917:	Henry Ford began production of agricultural tractors, in Dearborn, Michigan, USA.					
1918:	The Fiat model 702 tractor was launched and went into full production one year later in Turin.					
	Ford was forced by recession to close his US tractor production and move to Cork,					
1928:	I of a was forced by recession to close his bo tractor production and move to cork, Ireland.					
1940:	New Holland brought out its revolutionary Nolt mobile pick-up baler.					
1,101	Ford moved agricultural tractor production to a brand new factory in Basildon, UK.					
	Fiat acquired 25 per cent of a newly reconstructed Türk Traktor, in Ankara, Turkey, a					
1964:	move which was eventually to lead to the advanced CNH tractor plant now in					
	operation.					
1075.	Braud introduced its first grape harvester, now a world leader. New Holland					
1975:	established a first factory in Brazil, at Curitib					
1985:	Case merged with International Harvester Company to form Case IH.					
1986:	Ford acquired Sperry New Holland and merged it with its own tractor and					
1900.	construction machinery operations to form Ford New Holland.					
1996:	Case bought the <b>Steyr</b> agricultural tractor business.					
	New Holland signed a joint venture with the Koç Group, Turkey's largest industrial					
	conglomerate, for the production of tractors. The Türk Traktör factory based in Ankara					
1998:	was already producing Fiat tractors since the previous joint venture with the Fiat					
	Group dated 1967. A completely new plant near New Delhi, India began production of					
	New Holland agricultural tractors.					
1999:	As already noted above, New Holland purchased Case Corporation and re-named the company CNH Global NV. This had certain competition implications and in					
1999.	subsequent years some assets were shed.					
	Harbin Case New Holland is established in north East China, for light assembly					
	operations of tractors in the 140-210 horsepower range.					
	CNH sold the Laverda combine harvester and big baler business, based in Breganze, in					
	the north of Italy, to Argo Group of Italy. In the following year it sold the Doncaster,					
2000:	UK tractor plant and the design, manufacturing and commercial rights to certain					
	agricultural tractor lines in the European Economic Area and Switzerland to Argo. The					
	deal also included the purchase of the McCormick brand name. The new owners					
	created McCormick Tractors International Ltd and soon afterwards also acquired the					
	associated transmission plant in St Dizier, France from CNH.					
2001:	In Brazil it closed its Sorocaba plant, concentrating tractors and combine harvesters in					
	Curitiba; and planters, cane and coffee harvesters in Piracicaba.					
2002:	CNH established a joint venture in China - Shanghai New Holland Agricultural					
	Machinery Corporation Ltd. for the production of tractors.					
2009:	The CNH joint venture plant in Uzbekistan began production of the New Holland TL					
2010.	tractor series.					
2010:	CNH and KAMAZ of Russia finalised their strategic alliance, with a shared					
	manufacturing plant in Naberezhnye Chelny, Russia beginning production of two ranges of tractors in the 300 to 535 horsenower segment and 300 horsenower combine					
	ranges of tractors in the 300 to 535 horsepower segment and 300 horsepower combine family. CNH also took a 51 per cent interest in the related distribution company.In					
	Brazil it officially opened a new plant and parts centre in Sorocaba, after having					
	reopened the old plant in 2008.					
	reopened the out plant in 2000.					

## COMPANY STRUCTURE AND AREAS OF BUSINESS

#### ORGANISATION AND CORPORATE STRUCTURE

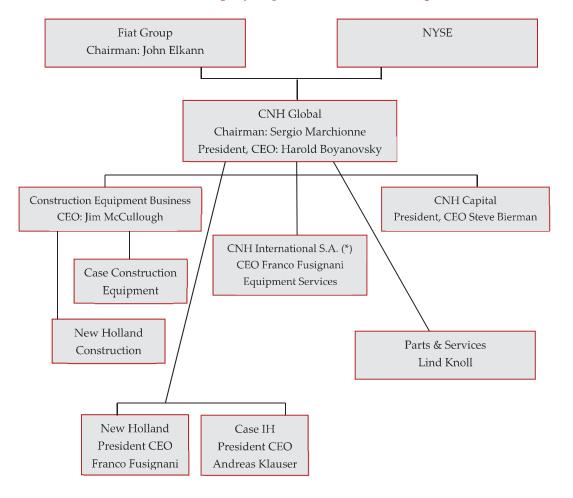
CNH Global, formed in November 1999 through the merger of New Holland and Case Corporation, is 89 per cent owned by Fiat. The remaining 11 per cent of the company's shares are widely held on the New York Stock Exchange (NYSE), under the ticker CNH.

CNH is one of nine sectors within the Fiat Group, a major industrial enterprise that designs, manufactures and sells automobiles, trucks, agricultural and construction machinery, engines, automotive components, and production systems. Other significant businesses in the Fiat Group include Iveco trucks and commercial vehicles, Fiat Powertrain technologies and Fiat Auto. In 2009 is responsible for 20 per cent of Fiat's €50.1 billion turnover (in spite of the downturn) and 32 per cent of the Group trading profit.

#### Table 1. Fiat Group: Operating Performance by Sector, 2009 (€ Million)

Sector	Turnover	Trading Profit(Loss)
Fiat Group Automobiles	26,293	470
Agricultural and Construction Equipment (CNH)	10,107	337
Trucks and Commercial Vehicles (Iveco)	7,183	105
FPT Powertrain Technologies	4,952	(25)
Components (Magneti Marelli)	4,528	25
Ferrari	1,778	238
Production Systems (Comau)	728	(28)
Metallurgical Products (Teksid)	578	(12)
Maserati	448	11
Others & Eliminations	(6,493)	(63)
Total	50,102	1,058

Source: Company Information



#### Table 2. CNH Global: Company Organisation and Ownership Structure, 2010

\* See comments below Source: Company Information

In April 2010 Fiat announced that it would spin off those activities not directly related to it car business. The proposed de-merger was approved by the Fiat board in July and by an extraordinary AGM in September. After its planned constitution in January 2011, Fiat Industrial will include Iveco, CNH and Fiat Powertrain Technologies' Industrial and Marine activities. The company will be led by Sergio Marchionne as chairman and will be publicly quoted on the Milan Stock Exchange. The CNH current existing structure is shown in table 2.

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CNH's worldwide operations in the construction equipment and farm machinery sectors are organised into business units with separate brand-driven commercial organisations and distribution networks. The traditional balance of product lines disappeared in 2009 because the construction equipment business went suddenly and severely downhill. In 2009 the agricultural equipment business unit accounted for 76 per cent of the company revenues, construction equipment only 15 per cent and financial services nine per cent of the total revenues. The overall responsibility for the company is vested with its Chairman Mr Sergio Marchionne who is also Chief Executive Officer of the Fiat Group. President and Chief Executive Officer of the CNH Group is Mr Harold Boyanovsky.

(\*) CNH International is the company, within CNH Global N.V., responsible for the manufacture, sales, distribution and after sales operations of agricultural and construction branded equipment in more than 120 countries throughout Africa, the Middle East, the Commonwealth of Independent States, Asia and Oceania, encompassing Australia, China and India. CNH International was established in 2007 to strengthen the focus of the CNH brands in emerging and high-growth markets.

#### SALES BY PRODUCT GROUP

CNH has three business sectors with combined total revenues of \$13.8 billion in 2009:

- Agricultural Equipment
- Construction Equipment
- Financial Services

Although CNH is a company that since its formation has been in processes of change, its balance between the two big business groups of farm machinery and construction equipment stayed consistently around 60 per cent farm machinery and 31-32 per cent construction equipment. This balance was slightly modified in 2008, due to the negative impact of the worldwide financial and economic crisis that had more aggressive consequences for the construction sector. During that year farm machinery turnover grew strongly, showing a 30 per cent increase thanks to inflated grain prices allowing farmers to invest heavily in new machinery. Construction equipment was not so lucky and by then many regions of the world were showing some weakness, even by mid-year. Construction equipment turnover fell by 11 per cent in 2008, then by 47 per cent in 2009.

Revenues and Sales	2005	2006	2007	2008	2009	2010 1st 9 Months	% Change
– Agricultural Equipment	7,843	7,809	9,948	12,902	10,663	8,295	3
- Construction Equipment	3,963	4,306	5,023	4,464	2,120	2,172	42
- Finance and Interest Income	801	952	1,131	1,356	1,190	1,038	25
– Eliminations and other	(32)	(69)	(138)	(246)	(213)	-	-
Total Consolidated Revenue	12,575	12,998	15,964	18,476	13,760	11,552	13
<b>Operating Profit (Loss)</b>							
– Agricultural Equipment	340	427	813	1,371	712	-	-
- Construction Equipment	265	373	412	116	(339)	-	-
Net Income							
– Financial Services	200	222	229	242	174	131	68
Net Income	163	292	559	825	(190)	243	-

# Table 3. CNH Global: Sales and Operating Profit by Business Group, 2005-2010(\$ Million)

Source: Company Information

Financing of customers has become a very important part of CNH financial operations and has remained profitable. In 2009 it accounted for eight per cent of revenues and made up, to a certain extent, for the losses made in construction equipment and the halving of profits in farm machinery.

The table shows the speed of the turn round in the company's fortunes in 2010, quoting where possible the unaudited data of the first nine months and the change compared to the same period of 2009. Construction equipment has achieved a dramatic change in fortunes driven by a robust recovery in demand in all regions. In Western Europe markets rose 27 per cent in the third quarter, while in Latin America the market was up by 85 per cent, driven by strong demand from projects in public and private sectors. The outlook is for a 40 to 45 per cent increase compared with the full year 2009. Agricultural equipment is up by 11 per cent in the third quarter, driven by raising grain prices in the latter part of the year.

#### **SALES BY REGION**

#### Table 4. CNH Global: Net Equipment Sales by Region, 2005-2009 (\$ Million)

	2005	2006	2007	2008	2009
Sales (\$ Mn)					
– North America	5,699	5,354	5,506	5,975	5,223
– Western Europe	3,643	3,843	4,995	5,345	3,681
– Latin America	766	1,001	1,738	2,457	1,751
– Rest of World	1,698	1,917	2,732	3,589	2,128
Total	11,806	12,115	14,971	17,366	12,783
Distribution (%)					
– North America	48	44	37	34	41
– Western Europe	31	32	33	31	29
– Latin America	7	8	12	14	13
– Rest of World	14	16	18	21	17
Total	100	100	100	100	100

Source: Company Information

Traditionally, with two strong farm machinery brands and its healthy and well established Case construction equipment operation, CNH has drawn a large part of its revenues from North America. That percentage diminished in 2007, when it was the one region where sales showed only very modest gains and in 2008 massive growth in the Latin American and Rest of World areas pushed its share down again. In 2009, however, the reaction to the shock to the financial system seen in 2008 affected Europe and many other parts of the world, while North American farmers were still spending their income from the grain price spike. North America has thus returned to account for 41 per cent of revenues.

#### **CONSTRUCTION EQUIPMENT SALES BY REGION**

# Table 5. CNH Global: Construction Equipment Sales by Region, 2005-2009(\$ Million)

	2005	2006	2007	2008	2009
Sales (\$ Mn)					
– North America	2,146	2,107	1,662	1,289	622
– Western Europe	1,126	1,277	1,788	1,266	513
– Latin America	313	452	714	907	588
– Rest of World	378	470	859	1,002	397
Total	3,963	4,306	5,023	4,464	2,120
Distribution (%)					
– North America	54	49	33	29	29
– Western Europe	28	30	36	28	24
– Latin America	8	10	14	20	28
– Rest of World	10	11	17	22	19
Total	100	100	100	100	100

Source: Company Information

The two major operations of the company have different histories, which have led to distinctive geographical market strengths. They are quite different from each other.

Up to 2006 the construction equipment business revenues were dominated by the Case operations in North America, accounting for 50 per cent or more of the world total. Then the market there began a decline that was slow at first but extremely fast by 2008-2009. CNH sales of construction equipment declined by 70 per cent, slightly more than the total industry and North America declined as a source of income down to 29 per cent in 2008 and 2009. Elsewhere Western Europe declined very fast after 2007 and in both years the company admits that it lost market share. Its share of turnover thus declined from a high point of 36 per cent in 2007 to only 24 per cent in 2009. Latin America rose in importance in those years because although the market fell seriously, CNH brands made significant gains in market share and in 2009 sales in the region were higher than in 2006. In that region, as in the rest of the world region, the year 2009 finished with somewhat of a market recovery in the last quarter.

#### AGRICULTURAL EQUIPMENT SALES BY REGION

North America is again the leading region for sales but in this case it has stayed at or above 40 per cent of the total in most years. In Europe New Holland far outsells Case IH. Western Europe accounts for a steady share of sales around 30 to 33 per cent but Latin America is on a rising trend, which will no doubt be supported by the increased manufacturing presence in Brazil in the future.

	2005	2006	2007	2008	2009
Sales (\$ Mn)					
– North America	3,552	3,247	3,844	4,685	4,602
– Western Europe	2,517	2,566	3,207	4,079	3,168
– Latin America	455	549	1,023	1,531	1,163
– Rest of World	1,319	1,447	1,874	2,587	1,730
Total	7,843	7,809	9,948	12,902	10,663
Distribution (%)					
– North America	45	42	39	36	43
– Western Europe	32	33	32	32	30
– Latin America	6	7	10	12	11
– Rest of World	17	19	19	20	16
Total	100	100	100	100	100

# Table 6. CNH Global: Agricultural Equipment Sales by Region, 2005-2009(\$ Million)

Source: Company Information

#### JOINT VENTURES AND ALLIANCES

CNH has entered several joint ventures over the past few years. As of the third quarter of 2010, the following major joint ventures and alliances were in existence.

#### **CONSTRUCTION EQUIPMENT**

**Global alliance with Kobelco:** In July 2002, CNH and Kobelco formed a global alliance for the development, production and marketing of crawler excavators, on a world-wide basis. CNH owns the 75 per cent of the European joint venture and 65 per cent of the American joint venture (Kobelco America). CNH has the exclusivity to use Kobelco technology in Europe, Africa, Middle East and the Americas, with a worldwide non-competition clause. Kobelco is responsible for manufacturing and marketing in Australia and Asia, including China and Japan. Kobelco maintains control of Asian activities but CNH acquires 20 per cent of Kobelco Construction Machinery (Japan).

**Global Alliance with Sumitomo:** Since April 1992, Case and Sumitomo Construction Machinery have aligned in an OEM relationship for the design, production and marketing of a full range of crawler excavators (7 to 82 tonnes) on a world-wide basis. Crawler excavators for the respective brands are produced in Chiba, Japan and marketed by Case, through its distribution on a world-wide basis, and by Sumitomo under the Sumitomo brand in Asia and select other countries, and the Link-Belt brand in the Americas.

**India** – CNH owns 50 per cent of L&T-Case Equipment Ltd, a joint venture with Larsen & Toubro for the manufacture and sale of backhoe loaders and compaction equipment.

#### AGRICULTURAL EQUIPMENT

**Turkey:** CNH and Koç Group own 38 per cent each of Türk Traktor Ve Ziraat Makineleri A.S., Türk Traktor facility produces and distributes various sizes of tractors, in the 50 to 95 horsepower class, under licence from New Holland and Case IH.

**Mexico:** CNH and Quimmco Group of Mexico each own 50 per cent of New Holland de Mexico, a manufacturer and distributor of farm tractors for sale in domestic and export markets.

**Japan:** CNH and H. Shibamoto each own 50 per cent of New Holland HFT Japan Inc., a distributor of agricultural equipment in Japan.

**Pakistan:** CNH owns a 43 per cent interest in Al-Ghazi Tractors Ltd; the joint venture company manufactures and distributes tractors, in the 55-85 horsepower segment, implements, spare parts and offers various irrigation products.

**Russia:** in 2010 CNH and KAMAZ, the largest Russian truck manufacturer, finalised their agreement to jointly produce and distribute agricultural and construction equipment in the Russian Federation. CNH controls 50 per cent of the industrial joint venture and the 51 per cent of the commercial one. The production site covers approximately 50,000 m<sup>2</sup> and will produce machinery to supply, at first, the Russian domestic market and afterwards other CIS countries.

**Uzbekistan:** CNH owns a majority interest in three joint ventures in Uzbekistan. UzCase Mash LLC and UzCase Tractor LLC produce agricultural tractors for sale in Uzbekistan and neighbouring countries.

A third joint venture, UzCase Service LLC, provides services for the agricultural and construction equipment. CNH owns a 60 per cent interest in UzCase Mash and a 51 per cent interest in each of UzCase Tractor and UzCase Service.

**China:** CNH has a 60 per cent share in Shanghai New Holland Agricultural Machinery Corporation which manufactures and distributes tractors in the 50 to 130 horsepower range.

A full list of CNH's joint venture holdings is available from the Securities and Exchange Commission (SEC) in the New York Stock Exchange.

#### MANUFACTURING FACILITIES

#### CONSTRUCTION EQUIPMENT

The table below details the construction equipment plants. Production was extremely low in 2009, due to the structural crisis of the construction sector worldwide and therefore the notes add comments on 2008 production levels, as they give a better indication of the normal production levels.

# Table 7. CNH: Summary of Worldwide Construction Equipment ProductionFacilities, 2010

		Approximate Covered	20	009 Production		
Country	Location	Area ('000 m <sup>2</sup> )	Products	(Units)	Notes	
USA	Burlington	96	Backhoe loaders	2,250	5,950 in 2008	
			Rough terrain vehicles	225	550 in 2008 – Case brand	
	Calhoun	32	Crawler excavators	1,500	3,200 in 2008	
			Crawler dozers	115	600 in 2008	
	Fargo	66	Wheeled loaders	585	1,915 in 2008. Also builds agricultural tractors	
	Wichita	48	Skid-steer loaders	3,700	11,200 in 2008	
			Skid-steer loaders (Track)	660		
Brazil	Belo Horizonte	49	Crawler excavators	500	600 in 2008	
			Crawler dozers	180	250 in 2008	
			Wheeled loaders	950	1,400 in 2008	
			Backhoe loaders	2,000	2,800 in 2008	
			Motor graders	400	650 in 2008	
Germany	Berlin	62	Motor graders	32	272 in 2008	
Italy	Imola	26	Backhoe loaders	370	7,380 in 2008	
			Mini excavators	125	2,300 in 2008	
			Compact wheeled loaders	53	300 in 2008	
	Lecce	137	Crawler dozers	51	351 in 2008	
			Wheeled loaders	73	825 in 2008	
			RTLTs – Telescopic	120	885 in 2008	
	San Mauro Torinese	60	Wheeled excavators	60	930 in 2008	
			Crawler excavators	160	1,070 in 2008	

Source: Company Information

In 2009 CNH announced it would close the plant in Imola, Italy. This will now happen in 2011.

The company also uses three outside suppliers, especially in the field of crawler and mini excavators.

#### Table 8. OEM Production of Construction Equipment for CNH, 2009

Manufacturer	Location	Products	2009 Production (Units)		
Kobelco Construction Machinery	Japan	Midi excavators	250		
		Crawler excavators	500		
		Mini excavators	550		
Sumitomo Construction Machinery	Japan	Midi excavators	100		
		Crawler excavators	900		
Astra Veicoli	Italy	Articulated dump trucks	40		
Courses Off III shares Decrearch					

Source: Off-Highway Research

#### AGRICULTURAL EQUIPMENT

# Table 9. CNH: Summary of Worldwide Agricultural Equipment ProductionFacilities, 2010

		Approximate Covered	
Country	Location	Area ('000 m <sup>2</sup> )	Main Products
USA	New Holland	108	Hay and forage equipment, balers
	Dublin	6	Compact agricultural tractors
	Fargo	66	Agricultural tractors
	Racine	110	Agricultural tractors, transmissions
	Grand Island	135	Combine harvesters, hay and forage equipment
	Benson	32	Agricultural sprayers and cotton pickers
	Goodfield	23	Tillage implements
Canada	Saskatoon	62	Air-seeding equipment
Brazil	Curitiba	91	Agricultural tractors, combine harvesters
	Piracicaba	11	Sugar cane and coffee harvesters; planters and sprayers
	Sorocaba	-	Combine harvesters
India	New Delhi	35	Agricultural tractors
China	Shanghai (joint venture)	-	Agricultural tractors
	Harbin	6	Agricultural tractors
Poland	Plock	100	Combine harvesters, balers
Austria	St Valentin	45	Agricultural tractors
Belgium	Antwerp	89	Components
	Zedelgem	151	Combine harvesters, hay and forage equipment
Italy	Jesi	63	Agricultural tractors
	Modena	107	Components
United Kingdom	Basildon	136	Agricultural tractors, components
France	Croix	13	Cabs
	Coex	-	Grape harvesters
Russia	Naberezhnye Chelny	-	Agricultural tractors, combine harvesters
Uzbekistan	Tashkent	-	Agricultural tractors
Pakistan	Dera Ghazi Khan	-	Agricultural tractors

Source: Off-Highway Research

In farm machinery the company has undertaken little consolidation since the divestments that were necessary after the merger. One exception in Europe was the closure of a plant in Neustadt in Eastern Germany in 2004 that had come with a design of a rotary combine harvester into Case IH in 1997. Production was transferred to Zedelgem, Belgium.

### MARKETING AND DISTRIBUTION IN EUROPE

CNH products are marketed and distributed under separate brand names through a separate network of dealers around the world. CNH's construction equipment is sold and distributed under the Case and New Holland Construction brands, while the agricultural equipment product lines are sold under the Case IH, New Holland and Steyr brand names in Western Europe.

#### **CONSTRUCTION EQUIPMENT**

#### Table 10. CNH: Dealer Networks for Construction Equipment in Europe, 2010

Country	Case	New Holland
Albania	Ergotrak	Paul J Condellis
Austria	Biegger & King	Kohlschein
Belarus	Convex, Agrotechnica	-
Belgium	Casetech, Dannemark	Oswald de Bruycker
Bosnia-Herzegovina	-	Delco Sarajevska
Bulgaria	Bulavto	Engineering NM, Inovex
Croatia	-	Grapo
Czech Republic	Casetec	Agrotec
Denmark	Conmak	Bay & Kjaersgaard
Estonia	Intrac Eesti	Kesko Agro Eesti
Finland	Konekesko	Konekesko
France	CNH	CNH
Germany	CNH	CNH
Greece	Ergotrak	Paul J Condellis
Hungary	Invest	IKR
Iceland	Vélaborg	-
Ireland	Jim Macadam	KK Traders, McSharry, Rock Machinery, Adare
Italy	CNH	CNH
Latvia	Sia Intrac	Konekesko Latvija
Lithuania	Uab Intrac	Kesko Agro Lietuva
Netherlands	Hansan	Oswald de Bruycker
Norway	Dagenborg Maskin, Beck, Maskin	Rishaug
Poland	Intrac	HKL, Roselwis, Agrohandel, Agros, Rentrak
Portugal	Entreposto Máquinas	Entreposto Máquinas
Romania	Case Utilaje Constructii, Ergotrak	Protruck International, Briaris
Russia	Wirtgen International, Impex	<u> </u>
Serbia	MCR Group 2009Casetec	-
Slovakia		Hydrex
Spain	CNH	CNH
Slovenia	VI Trade	Adriano Corsi
Sweden	Intrac	Eliassons Maskin
Switzerland	Hand, Jaquet	MBA
Turkey	Çukurova Ziraat	Hasel, Çukurova Ithalat
United Kingdom	CNH	CNH
Ukraine	Wirtgen, Universal Service	-

Source: Company Information

The European construction equipment dealer network is managed locally by CNH subsidiaries in France, Germany, Italy, Spain and the UK. At the dealer level in these

countries the two brands generally maintain separate dealer networks. In other countries national importers represent the CNH brands and in the case of a few countries one business has taken on the two brands, notably Czech Republic, Finland and Portugal.

#### AGRICULTURAL EQUIPMENT

The agricultural equipment dealers tend to be more numerous. The main representation is shown below.

Country	Case IH	New Holland
Albania	-	Paul J. Condellis
Austria	Case-Steyr	New Holland
Belarus	Convex	-
Belgium	New Holland	New Holland
Bulgaria	Rimex	Vanto Trade
Croatia	Stepco	Adriano Corsi
Czech Republic	5 independents	Agrotec
Denmark	New Holland	New Holland
Estonia	-	Tatoli
Finland	Agritek	Agritek
France	CNH	New Holland
Germany	CNH	New Holland
Greece	Paul J Condellis	Paul J Condellis
Hungary	Invest	IKR
Iceland	Velatorg	Kraftvelar
Ireland	CNH	New Holland
Italy	CNH	New Holland
Latvia	-	SIA Preiss Agro
Lithuania	Dotnuvos	Lytagra
Netherlands	Independents	New Holland
Norway	AK Maskiner	AK Maskiner
Poland	Interhandler	New Holland
Portugal	Entreposto Máquinas	New Holland
Romania	Tadis Agro	NHR Agropartners
Russia	Grünbaer, Agrostar	CNH-KAMAZ Commercial
Serbia	Vait	IKR
Slovakia	Agri CS	Farm Systems
Spain	CNH	New Holland
Slovenia	4 independents	ITRO
Sweden	Soderberg & Haak	Soderberg & Haak
Switzerland	Rapid	Bucher, Grunderco
Turkey	AK Maskiner	AK Maskiner
United Kingdom	CNH	New Holland
Ukraine	3 independents	-
	Source: Company Informa	ation

#### Table 11. CNH: Dealer Networks for Agricultural Equipment in Europe, 2010

Source: Company Information

CNH has branches managing dealer networks in the major markets of France, Germany, Italy, Spain, Portugal and UK, as well as in some smaller markets, such as

Poland, Austria, Denmark and Benelux. In many smaller territories there are networks of independent dealers to serve customers there.

### FINANCIAL DATA

After showing little growth in 2004 to 2006 CNH consolidated revenues grew fast in 2007 and 2008, to a peak of \$18.4 billion in 2008, up 19 per cent compared to 2007. Then came a year of major difficulties, 2009, when revenues decreased by 25 per cent and the company made a loss of \$222 million.

# Table 12. CNH Global NV: Financial Highlights of Operations, 2007-2009(\$ Million)

	C	onsolidat	ed	<b>Equipment Operations</b>		rations	Financial Ser		rvices_
	2007	2008	2009	2007	2008	2009	2007	2008	2009
Revenues									
– Net Sales	14,971	17,366	12,783	14,971	17,366	12,783	-	-	-
- Finance and Interest Income	993	1,110	977	190	205	131	1,131	1,356	1,190
Total Revenue	15,964	18,476	13,760	15,161	17,571	12,914	1,131	1,356	1,190
Costs and Expenses									
– Costs of goods sold	12,154	14,054	10,862	12,154	14,054	10,862	-	-	-
– Selling, General and Administrative	1,436	1,698	1,486	1,183	1,403	1,150	253	295	336
– Research, Development and Engineering	409	422	398	409	422	398	-	-	-
- Restructuring	85	39	102	85	34	98	-	5	4
– Interest Expense – Fiat Affiliates	140	308	189	39	101	78	101	207	111
– Interest Expense – Other	561	457	482	319	257	242	378	399	386
- Interest Compensation to Financial Services	-	-	-	247	275	202	-	-	-
– Other, Net	349	342	334	224	204	201	70	115	129
Total Expenses	15,134	17,320	13,853	14,660	16,750	13,231	802	1,021	966
Income (Loss) Before Taxes	830	1,156	(93)	501	821	(317)	329	335	224
Income Tax Provision (Benefit)	354	385	92	245	279	33	109	106	59
Equity in Income (Loss) of Unconsolidated									
_ Subsidiaries and Affiliates:									
– Financial Services	9	13	9	229	242	174	9	13	9
- Equipment Operations	89	40	(46)	89	40	(46)	-	-	-
Net Income (Loss)	574	824	(222)	574	824	(222)	229	242	174
Net Income (Loss) Attributable to Non-Controlling	15	(1)	(32)	15	(1)	(32)	-	-	-
Interest	559	825	(190)	559	825	(190)	229	242	174

Source: Company Information

In 2009 the company decreased production severely and reduced pipeline inventories, so that part of the fall came from that action and part from tendencies such as the decline of 38 per cent in the worldwide construction equipment industry, with the light equipment industry down 45 per cent and the heavy industry down 30 per cent. Agricultural tractor sales were flat in developed markets and reduced elsewhere.

Research and development expenses were about three per cent of net sales in 2009, up from 2.2 per cent in 2008 but actually lower. Investments and development expenditure has continued, in other words, in spite of the sudden fall in revenue.

#### **CORPORATE STRATEGY**

CNH business strategy revolves around capitalising on its core strengths and competences, which means concentrating on agricultural and construction machinery and implementing economic consolidation. The basis of its strategic imperatives can be identified as follows.

#### **GLOBAL PRODUCT PLATFORMS**

CNH has stressed its strategy of approaching the agricultural and construction equipment markets in much the same fashion as the car industry approaches the automotive market, i.e. using common platforms and component sharing to reduce complexity and costs in purchasing and manufacturing. The platform approach creates efficiencies and synergies through the adoption of common designs and core engineering concepts. The construction equipment is focused on the multi branded products offering, ensuring that customers' needs and experience are leading the product definition process.

In the agricultural tractor business the accent has changed from differentiated appearance to deeper distinction between the Case IH and New Holland products. The problem was that with the use of exactly the same components for the two brands the dealer networks lost the feeling of uniqueness that is a necessary part of supporting a single brand. The result was a trend of defections in the Case IH network, in Europe at least, that did a lot of damage. The trend has been defeated in the last two years by the creation of a spiritual and practical centre for the Case IH brand in the St Valentin plant in Austria. Case IH engineers still use common components but can develop their own approaches and products. A good example is transmissions where the CVT concept allows the development of a unique control system while the gearbox remains the same. Similarly cab designs can be different. It is notable, for instance, that the stylists used by New Holland in Italy are not the same as the consultants in the USA used by Case IH.

#### MULTI-BRANDING THROUGH MULTIPLE DISTRIBUTION

Historically, CNH is a composite of merged companies, and to take full advantage of its global market and to retain and strengthen its competitive position, it has decided to maintain its multiple brand and multiple distribution business model.

In the construction equipment market the company operates under two different brand names and distribution networks, and although its product lines are often over-lapping, each brand has strengths for different customers in various geographical markets around the world. Likewise, each company has some specialised products which the other does not have.

The strengths of CNH brands can be summarised as follows:

#### CASE

- Global full liner with American roots and values and links in agriculture.
- Leverage on reliability and customer friendly image.
- Strong brand name and tradition in light equipment.

#### **NEW HOLLAND**

- Global equipment supplier with strong links to agriculture.
- Good reputation in skid-steer loaders and backhoe loaders.
- Strong European crawler excavator supplier with Japanese technology.

#### **EXPANDING MARKET COVERAGE**

Through a well established global relationship with Kobelco of Japan, together with already existing manufacturing joint ventures in India, China, Turkey, Pakistan, Russia, Uzbekistan, Poland and Mexico, CNH is gaining invaluable experience in using local partners to access and position its products in new and potentially lucrative markets. The joint ventures that the company currently has in place give it an edge over other competitors looking for entry into developing markets through exports from existing facilities in mature markets.

#### **EXPANDING CAPABILITIES OF FINANCIAL SERVICES**

To capture a larger share of customers' financing requirements CNH Financial Services offers a variety of financing solutions, including operating leases, rental, credit cards, commercial lending and insurance.

#### **FUTURE PLANS**

The company stated in April 2010 that the goal is to increase annual sales to \$19.8 billion by 2014 from \$12.8 billion in 2009. The strategy has four major components:

- Upgrading the quality of the company's equipment
- Overhauling the construction equipment business
- Lowering manufacturing costs
- Positioning the company for expansion in such emerging markets as Russia and India.

# **EQUIPMENT ANALYSIS**

#### AGRICULTURAL TRACTORS

#### Table 13. CNH: Agricultural Tractors Available in Europe, 2010

Manufacturer	Model	HP	Manufacturer	Product Source
Case IH	JX60	59	Iveco	Turkey
	Farmall 65C	65	FPT	Turkey
	Quantum 65V	65	Iveco	Italy
	JX70	69	Iveco	Turkey
	JXU75	76	Iveco	Italy
	Farmall 75C	78	FPT	Turkey
	Quantum 75N/V	78	Iveco	Italy
	JX80	80	Iveco	Turkey
	CS80 Pro	82	Iveco	Austria
	Farmall 85C	85	FPT	Turkey
	Quantum 85V	85	Iveco	Italy
	JXU85	86	FPT	Italy
	JX90	89	Iveco	Turkey
	Farmall 90U	88	FPT	Turkey
	Farmall 100U	98	FPT	Turkey
	Quantum 85N	78	Iveco	Italy
	JX95	94	Iveco	Turkey
	Farmall 95C	95	FPT	Turkey
	Quantum 95N	97	Iveco	Italy
	Maxxum 100	101	Iveco	Austria
	Farmall 110U	110	FPT	Turkey
	JXU115	113	Iveco	Italy
	Maxxum 110	112	Iveco	Austria
	Maxxum 115	112	Iveco	Austria
	Maxxum 120	121	Iveco	Austria
	Maxxum 125	126	Iveco	Austria
	Puma 125	120	Iveco	Austria
	Puma 130	130	Iveco	Austri
	Maxxum 130	130	Iveco	Austria
	Maxxum 130 Maxxum 140	132	Iveco	Austria
	Puma 145	141	_	
	Puma 143	145	Iveco	Austria
			Iveco	Austria
	Puma 170/CVX	170	Iveco	Austri
	Puma 185/CVX	185	Iveco	Austria
	Puma 200/CVX	200	Iveco	Austria
	Puma 215/CVX	215	Iveco	Austria
	Puma 230CVX	228	Iveco	Austria
	Magnum 235	235	Iveco	USA
	Magnum 260	257	Iveco	USA
	Magnum 290	284	Iveco	USA
	Magnum 315	311	Iveco	USA
	Magnum 340	340	Iveco	USA
	Steiger 450	450	Iveco	USA
	Steiger 435	489	Iveco	USA
	Quadtrac 400	433	Iveco	USA
	Quadtrac 500	500	Iveco	USA
	Quadtrac 550	602	Iveco	USA
	Quadtrac 600	600	Iveco	USA

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Manufacturer	Model	HP	Manufacturer	Product Source
New Holland	TD3.50	50	FPT	Turkey
	T3020	44	Yanmar	Italy
	T3030	48	Yanmar	Italy
	T3040	54	Yanmar	Italy
	TD5010	60	FPT	Turkey
	TD4020F	65	FPT	Turkey
	T4020 Deluxe/V	65	FPT	Italy
	TD5020	72	FPT	Turkey
	TD5030	76	FPT	Italy
	TD4030F	78	FPT	Turkey
	T4030 Deluxe/V/N/F	78	FPT	Italy
	TD4040F	88	FPT	Turkey
	T4040 Deluxe/V/N/F	88	FPT	Italy
	T5040	86	FPT	Italy
	TD5040	88	FPT	Turkey
	TD5050	95	FPT	Turkey
	T4050 Deluxe/V/N/F	97	FPT	Italy
	T5050	97	FPT	Italy
	T5060	106	FPT	Italy
	T5070	113	FPT	Italy
	T6010 Delta/Plus	101	FPT	UK
	T6020 Delta/Plus/Elite	112	FPT	UK
	T6030 Delta/Plus	117	FPT	UK
	T6040 Elite	122	FPT	UK
	T6050 Delta/Plus	126	FPT	UK
	T6060 Elite	132	FPT	UK
	T6070 Plus	141	FPT	UK
	T7.170	171	FPT	UK
	T7.185	188	FPT	UK
	T7.200	203	FPT	UK
	T7.210	203	FPT	UK
	T7.220	212	FPT	UK
	T7.235	234	FPT	UK
	T7.250	254	FPT	UK
	T7.260	260	FPT	UK
	T7.270	269	FPT	UK
		209		USA
	T8.275		FPT	
	T8.300	298	FPT	USA
	T8.330	327	FPT	USA
	T8.360	367	FPT	USA
	T8.390	389	FPT	USA
	T9.390	390	FPT	USA
	T9.450	446	FPT	USA
	T9.505	502	FPT	USA
	T9.560	557	FPT	USA
	T9.615	613	FPT	USA
	T9.670	669	FPT	USA

#### Table 13. CNH: Agricultural Tractors Available in Europe, 2010 (continued)

Source: Company Information

CNH supplies tractors from its Jesi plant in Italy up to 115 horsepower; then divides between a different range for New Holland supplied from the Basildon plant in the UK and a range for Case IH issuing from its St Valentin plant in Austria. The New Holland T3000 series is made by Argo Tractors and has a Yanmar engine. Case IH buyers also have the CS range of medium tractors from the Austrian plant in the 80 to 100 horsepower medium size category. Among the larger tractors, the Basildon range of New Holland products runs to 270 horsepower, the new T7 range being equipped with the in-house CVT transmission made in Antwerp. Case IH, on the other hand, makes a major point of the CVT gearbox in all its products from 140 to 220 horsepower, supplementing them with two ranges of powershift transmission tractors, the Maxum up to 140 horsepower and the Puma from 160 to 225 horsepower. For both marques all tractors of more than 220 horsepower come from the USA.

#### PRODUCTION

CNH is by a long way the largest producer of agricultural tractors in Europe, accounting for 28 per cent of the region's total. The largest volumes emerge from the plant in Jesi, Italy. Opened in 1977, it covers 18.6 hectares near Ancona, and has a covered area of 64,500 m<sup>2</sup>. It employs more than 900 people and assembles specialised tractors for vineyards and orchards, as well as medium-sized tractors from 65 to 108 horsepower. The latest versions of these designs are the New Holland T4000 and T5000 series, with Tier III New Holland and FPT engines and some other more minor updates in them. They are also sold as the Case IH JXC range and the Steyr compact tractor range. Jesi is also the only source for New Holland crawler tractors, the TK4000 models from 65 to 101 horsepower; and vineyard/orchard tractors in the form of the T4000 F, N and V series.

#### Table 14. CNH: Production of Agricultural Tractors in Western Europe by Country, 2005-2009 (Units)

	2005	2006	2007	2008	2009
Italy	29,500	29,000	31,000	31,000	27,000
United Kingdom	21,000	20,000	23,000	23,000	21,000
Austria	7,045	5,700	7,400	11,500	10,000
Total	57,545	54,700	61,400	65,500	58,000

Source: Off-Highway Research

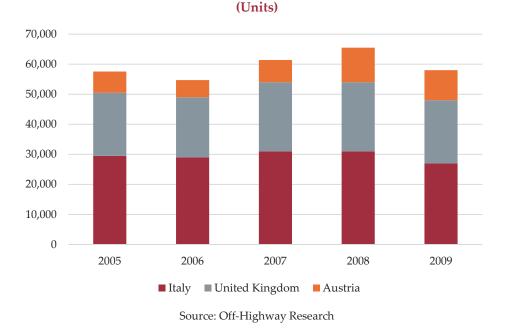


Chart 1. CNH: Production of Agricultural Tractors in Western Europe by Country, 2005-2009

The UK plant in Basildon has supplied only New Holland brand tractors since 2006, the year in which it launched the T7000 series (160 to 220 horsepower, now known as the T7 range). In 2011 it will begin to ship the successor T7 series, with the 6.7 litre FPT engine corresponding to the Stage IIIB emissions norms. For the larger category below it, 100 to 140 horsepower, it launched the T6000 series in 2007, now sold in three specifications, Delta, Plus with a powershift gearbox option, a suspended front axle and a new cab with a noise level of only 70 dBA and the Elite. It no longer produces lower specification tractors, as it did before the new products, production of that type having been shipped off to Brazil.

Finally the Austrian plant, which has been since 2006 the European 'home' of the Case IH brand, has notably succeeded in nearly doubling production between 2006 and 2008. This has been achieved thanks to the concerted action taken to rescue the Case IH dealer network, improving morale but also finding some good quality new recruits, thanks to the progressive product policy. Originally the source of Steyr brand tractors, the plant still produces a medium-sized tractor for Steyr dealers, the 9000 MT, which also appears as the Case IH CS Pro and a broad range of CVT tractors that employ a transmission developed in nearby Steyr Transmissions, now part of ZF.

The site of 17 hectares has 42,000 m<sup>2</sup> of covered area. Production capacity originally extended to 7,800 units per year on a one shift basis, but has been expanded to cope with the substantial extra demand generated by the Case IH tractor ranges. The main volumes are from the Steyr Profi model, also produced in Case IH's red livery and

decals, and sold as the Maxxum range in world markets; and the Steyr CVT/Case IH CVX range.

Component	Italy	UK	Austria
Engines	FPT	FPT	FPT
Transmissions	In-house	CNH Antwerp and Modena	ZF
4WD Axles	In-house	In-house	Carraro
Hydraulic Pumps	In-house	Various	Various
Hydraulic Systems	In-house	In-house	Bosch Rexroth
Cabs	CNH Croix	CNH Croix; Airflow	CNH Croix
Tyres	Mainly Goodyear	Goodyear, Michelin, Kleber,	Goodyear, Michelin,
Tyles	Walling Goodycal	Firestone and Trelleborg	Continental and Trelleborg

#### COMPONENT SOURCING

Table 15. CNH: Component Sourcing for Agricultural Tractors by Plant, 2010

Source: Company Information

CNH plants now supply a high proportion of the vital parts of the tractor ranges assembled. Engines, transmissions and cabs come under this heading. The hydraulic system employs the industry standard Bosch sensor pins on the electronic lower linkage but the rest of the system comes from CNH, with the exception of the Bosch remote valves.

The engine sourcing will change somewhat for 2011, with the arrival of new emissions legislation. All CNH tractors over 100 horsepower will have SCR engines from the sister company FPT, meaning an end to the use of the Sisu engine in the Case IH CVT. Engines under 100 horsepower will use EGR and will continue to come from FPT.

CNH has become a CVT transmission manufacturer by developing two new systems – one for tractors up to 115 horsepower using a steel chain and pulley variator and used only in the USA so far; and a more conventional unit for tractors of 150-250 horsepower. The latter is installed in a new tractor platform assembled in the plant in St Valentin, Austria and in Basildon, UK, and is destined to replace the current design using the ZF Steyr S-Matic transmission. It is an in-house development assembled at the group's transmissions plant in Antwerp, Belgium. It comprises four ranges – three providing field speeds, one for road travel – with a preselect system employing a pair of wet-clutch packs designed to give imperceptible switching between them.

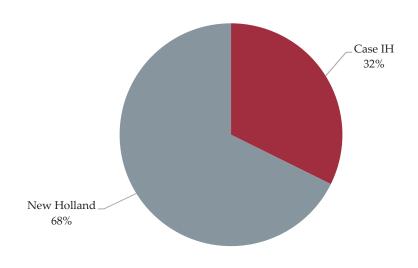
#### SALES BY COUNTRY

# Table 16. CNH: Sales of Agricultural Tractors in Selected European Countries by Brand, 2009

	Cas	se IH	New	Holland
	Units	% Market Share	Units	% Market Share
Austria	1,482*	22*	1,013	15
Belgium	222	10	629	29
Denmark	275	13	500	23
Finland	148	5	288	10
France	2,820	7	4,500	11
Germany	2,843	10	1,695	6
Greece	79	4	270	14
Ireland	250	7	700	18
Italy	585	2	5,628	21
Netherlands	175	6	1,000	34
Norway	163	6	437	17
Portugal	100	2	985	19
Spain	610	5	1,970	17
Sweden	216	6	578	17
Switzerland	100	5	340	17
United Kingdom	1,140	7	2,950	18
Total	11,208	7	23,483	15

\* Includes Steyr Source: Off-Highway Research

#### Chart 2. CNH: Sales of Agricultural Tractors in Selected European Countries by Brand, 2009 (Total %)



Source: Off-Highway Research

In the mature markets of Western Europe New Holland has held steadily to a market share of 15/16 per cent in agricultural tractors, although it has recently claimed that in the much slower market of 2010 it has scored some notable successes in increasing its share of what business still exists. Case IH is a different story, since its fortunes were definitely at low ebb by 2005, as dealers reacted negatively to the lack of

differentiation in the product. Since then a major effort on many fronts has been repaid with growth in market share of one to two points, according to territory.

The European market leader in agricultural tractors is John Deere but New Holland is the market leader still in Belgium, Denmark, Italy, Portugal and Switzerland; and Steyr leads the market in Austria. In the historical context one can see the two enterprises that made up New Holland as perfectly complementary – Ford strong in larger tractors and northern Europe, Fiatagri strong in smaller products and the south. It was not inevitable that they would emerge as successful but it was always a promising start.

#### **ARTICULATED DUMP TRUCKS**

#### **PRODUCT RANGE**

Brand	Model	Payload (Tonnes)	HP	Manufacturer	Product Source
Case	327B	23.2	315	Iveco	Astra Piacenza
	330B	28.2	349	Iveco	Astra Piacenza
	335B	31.5	410	Iveco	Astra Piacenza
	340B	36.0	456	Iveco	Astra Piacenza

#### Table 17. CNH: Articulated Dump Trucks Available in Europe, 2010

Source: Company Information

Astra Veicoli Industriali, part of Iveco, moved into articulated dump truck production in 2000, buying manufacturing rights from a British company, DDT Engineering. Astra, located in Piacenza in northern Italy, has a production capacity of about 2,000 dump trucks per year, and since its inception in 1956 has manufactured over 36,000 vehicles. In recent years the production rate has increased to almost 2,000 units, including military vehicles and articulated dump trucks. It has a very small production of off-highway rigid trucks (between 20 and 30 units per year) but the product sold by CNH is its articulated dump truck.

The company now offers four articulated models with payloads from 23 to 37 tonnes marketed worldwide under the Astra and Case brand names. In 2006 to 2008 Astra assembled approximately 200 articulated dump trucks per year, with the North American market being the best area.

#### **BACKHOE LOADERS**

#### MODEL RANGE

The current models are now manufactured using "common platforms" and component sharing to reduce purchasing and manufacturing costs. The Case Super R recently updated to Series 3, has been made in Imola, Italy since 2004. The Super R, which is a development of the Super M, has a new drive line system available

with a choice of Power shuttle or Powershift transmission. The new cab has a new control system incorporating an onboard computer. The change of series has given an opportunity to install a larger fuel tank and a hydraulic oil reservoir in a moulding that holds the tool box and the battery compartment. Finally, the loader geometry has been redesigned to give 18 per cent greater breakout force. At the same time a new Case NEF Family III engine has been introduced in all models.

Brand	Model	Туре	HP	Manufacturer	Service Weight (Tonnes)	Product Source
Case	580 Super R Series 3	R	100	CNH	8.1	CNH Lecce
	580 Super R+ Series 3	R	100	CNH	8.1	CNH Lecce
	590 Super Series 3	R	110	CNH	8.1	CNH Lecce
	695 Super Series 3	4WS	110	CNH	8.8	CNH Lecce
New Holland	B90B	R	100	CNH	8.2	CNH Lecce
	B100B	R	100	CNH	8.4	CNH Lecce
	B110B	R	110	CNH	8.4	CNH Lecce
	B115B	4WS	112	CNH	9.1	CNH Lecce

#### Table 18. CNH: Backhoe Loaders Available in Europe, 2010

R – Rigid chassis, 4WS – Four wheel steer Source: Company Information

The New Holland range of backhoe loaders was updated in 2009 and features a new Tier 3 CNH-Iveco diesel engine. All rigid models carry a synchromesh transmission while the all wheel-steer machines have an electronically controlled full powershift transmission with either an automatic or manual gearbox.

#### PRODUCTION

CNH has been one of the leading manufacturers of backhoe loaders in Europe and accounted for about 25 per cent of European production in 2006 to 2008.

#### Table 19. CNH: Production of Backhoe Loaders in Europe, 2005-2009 (Units)

2005	2006	2007	2008	2009
7,050	7,976	11,000	7,830	370
	0		,	

Source: Off-Highway Research

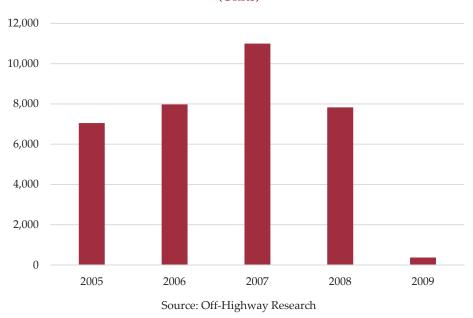


Chart 3. CNH: Production of Backhoe Loaders in Europe, 2005-2009 (Units)

After a high point of 11,000 units made in 2007, production declined steeply as the European market shrank by 40 per cent in 2008 and the company moved production of the units destined for North America to that continent. In 2009 there was very little production at all. In 2001 production will move to the Lecce plant, which will supply all CNH backhoe loaders for sale in Europe and the New Holland products destined for North America.

#### **COMPONENT SOURCING**

#### Table 20. CNH: Component Sourcing for Backhoe Loaders, 2010

	Case	New Holland
Diesel Engines	CNH	CNH
Transmissions	Carraro, Turner	Powershift: Dana Spicer, Powershuttle: Turner
Hydraulic Pumps	Parker, Casappa	Casappa
Axles	Carraro	Carraro, CNH Antwerp
Cabs	CNH Modena	CNH Modena
Seats	Grammer	Grammer
Steelworks	Sub-contracted	Sub-contracted
Tyres	Goodyear, Michelin, Solideal	Goodyear, Michelin, Solideal

Source: Company Information

CNH uses the latest CNH diesel engines that meet the Tier 3 emission requirements. For the Case backhoe loader the whole transmission is sourced from Carraro, while the New Holland machine utilises either Turner power shuttle transmission or Dana Spicer powershift boxes, while the axles are sourced from Carraro. Hydraulic pumps are now outsourced to Casappa, while cabs are supplied by the CNH plant in Modena. All steelwork components, including frames, are sourced from Stavmek in the Czech Republic or Komelf in Romania.

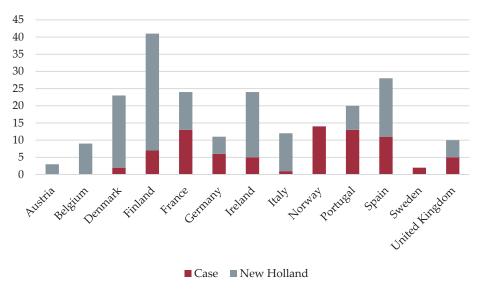
#### SALES BY COUNTRY

Table 21. CNH: Sales of Backhoe Loaders in Europe by Country and Brand, 2009

	Units			C	% Market Share			
	Case	New Holland	Total	Case	New Holland	Total		
Austria	-	2	2	-	3	3		
Belgium	-	2	2	-	9	9		
Denmark	3	27	30	2	21	23		
Finland	5	25	30	7	34	41		
France	122	106	228	13	11	24		
Germany	4	3	7	6	5	11		
Ireland	2	8	10	5	19	24		
Italy	4	57	61	1	11	12		
Norway	1	-	1	14	-	14		
Portugal	62	34	96	13	7	20		
Spain	54	81	135	11	17	28		
Sweden	2	-	2	2	-	2		
United Kingdom	75	75	150	5	5	10		
Total	334	420	754	7	9	16		

Source: Off-Highway Research





Source: Off-Highway Research

The collapse of the European backhoe loaders market after 2007 hit CNH extremely hard. Up to that time Case dealers would sell around 1,200 backhoe loaders in Western Europe while New Holland dealers would deliver 1,500 machines per year. Together the machines made in Imola could be said to have won a little over 20 per cent of the market, positioning them second in Europe, behind JCB. Last year volumes were down by about three quarters.

The Case dealers are strongest in France, UK and the Iberian Peninsula, while New Holland performs best in Spain, Denmark and France.

#### **CRAWLER DOZERS**

#### MODEL RANGE

#### Table 22. CNH: Crawler Dozers Available in Europe, 2010

Brand	Model	HP	Manufacturer	<b>Operating Weight (Tonnes)</b>	Product Source
Case	1150K	118	Case	13.0	CNH Calhoun
	1650L	144	Case	15.3	CNH Calhoun
New Holland	D150	140	Cummins	14.9	CNH Lecce
	D150B	143	CNH	12.2	CNH Calhoun, USA
	D180	194	CNH	20.5	CNH Lecce
	D180LGP	211	CNH	22.3	CNH Lecce

Source: Company Information

CNH produces crawler dozers under both the Case and New Holland brands. Case models are manufactured in the Calhoun plant in the United States and are primarily destined for the North American market. At Bauma 2010, however, Case launched the models 1150K and 1650L in the European market.

The New Holland line consists of four models. The D150B comes from the USA, the rest from the Lecce plant. The latest introduction to the range, the D180 and D150B models, feature new CNH Tier 3 diesel engines. The models D255 and D350 have Tier II Cummins engines and are therefore not sold in the European Union.

#### PRODUCTION

# Table 23. CNH: European Production of Crawler Dozers, 2005-2007(Units)

2005	2006	2007	2008	2009		
295	260	450	345	51		

Source: Company Information

CNH produces its crawler dozers alongside wheeled loaders and telescopic rough terrain lift trucks at the Lecce plant in the south of Italy. In the past crawler dozers have been one of the main contributors to the plant's production volume, although the decline in the European crawler dozer market, and diminishing exports elsewhere, has reduced its production. Very few units were produced in 2009.

#### **COMPONENT SOURCING**

#### Table 24. CNH: Component Sourcing for Crawler Dozers, 2010

Cummins, CNH
CNH
Bosch Rexroth, Commercial
CNH, Hydrauto
Tesio
SIAC
Berco
CNH

Source: Off-Highway Research

Diesel engines are either sourced from CNH and Cummins, the latter only for the Tier II types, while all cabs are now sourced from the SIAC Group and tracks from Berco. The tracks and body frame components are manufactured in-house, while hydraulic cylinders, based on Kayaba technology, are either manufactured at CNH's plant in San Mauro or are sourced from Hydrauto in Sweden.

#### SALES BY COUNTRY

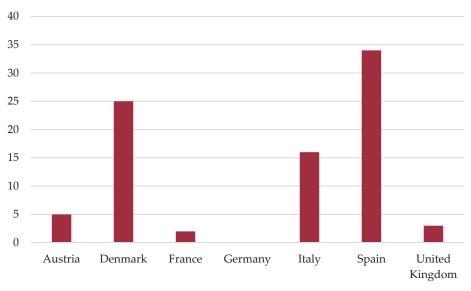
Italy, Spain and the United Kingdom are the main markets for New Holland in Europe.

#### Table 25. CNH: Sales of New Holland Crawler Dozers in Europe, 2009

	Units	% Market Share
Austria	1	5
Denmark	3	25
France	2	2
Germany	1	-
Italy	10	16
Spain	12	34
United Kingdom	2	3
Total	31	5

Source: Off-Highway Research

Chart 5. CNH: Sales of New Holland Crawler Dozers in Europe, (% Market Shares) 2009



Source: Off-Highway Research

#### HYDRAULIC EXCAVATORS

#### MODEL RANGE

CNH markets a wide range of hydraulic excavators under both the Case and New Holland brands. Case offers a product line of seven wheeled and 16 crawler models ranging from 8 to 82 tonnes. Case crawler excavators are produced by Sumitomo Construction Machinery in Japan with all the latest models featuring all-electronic management on both engine and hydraulic power. The B-series, launched in 2008, has introduced a significant improvement in fuel economy, better visibility, isolating cab mountings, stronger steel structures and a quieter engine to reduce both noise and vibration for the operator. The latest generation of wheeled models, produced in Italy, offers Case Family III diesel engines which comply with the EU Stage IIIA directive.

New Holland's Evolution Series of crawler excavators, made at San Mauro in Italy and derived from Kobelco technology, combines high performance with low fuel consumption and reduced noise levels of new Stage IIIA compliant CNH diesel engines. These models, together with New Holland Short Radius (SR) models sourced from Japan offer many innovative features, including stylish and functional air-conditioned cabs with ergonomic positioning of switches and controls. In 2010 the company has just launched a completely new range of wheeled excavators, the WE series, starting with three models that cover 75 per cent of the European market in three sizes from 16 to 20 tonnes. Midi excavators and two models over 20 tonnes continue the established MH design.

#### Table 26. CNH: Hydraulic Excavators Available in Europe, 2010

					Service Weight	
Туре	Brand	Model	HP	Manufacturer	(Tonnes)	Product Source
Wheeled	Case	WX95	99	CNH	10.0	CNH San Mauro
		WX125	112	CNH	12.6	CNH San Mauro
		WX145	121	CNH	15.9	CNH San Mauro
		WX165	141	CNH	17.8	CNH San Mauro
		WX185	158	CNH	19.9	CNH San Mauro
		WX210	173	CNH	20.8	CNH San Mauro
		WX240	173	CNH	22.4	CNH San Mauro
	New Holland	MH2.6	99	CNH	9.6	CNH San Mauro
		MH3.6	113	CNH	12.1	CNH San Mauro
		WE150 Compact	121	CNH	15.2	CNH San Mauro
		WE170 Compact	141	CNH	17.3	CNH San Mauro
		WE190	159	CNH	19.9	CNH San Mauro
		MH6.6	173	CNH	21.0	CNH San Mauro
		MH8.6	173	CNH	22.2	CNH San Mauro
Crawler	Case	CX75SR	54	Isuzu	8.0	Sumitomo Construction Machinery Japan
		CX80	54	Isuzu	8.3	Sumitomo Construction Machinery Japan
		CX130B	95	Isuzu	12.5	Sumitomo Construction Machinery Japan
		CX135SR	95	Isuzu	13.4	Sumitomo Construction Machinery Japan
		CX160B	120	Isuzu	17.1	Sumitomo Construction Machinery Japan
		CX180B	120	Isuzu	17.9	Sumitomo Construction Machinery Japan
		CX210B	157	Isuzu	21.5	Sumitomo Construction Machinery Japan
		CX225SR	153	Isuzu	24.1	Sumitomo Construction Machinery Japan
		CX230B	157	Isuzu	23.6	Sumitomo Construction Machinery Japan
		CX240B	177	Isuzu	25.0	Sumitomo Construction Machinery Japan
		CX290B	207	Isuzu	29.8	Sumitomo Construction Machinery Japan
		CX350B		Isuzu	34.2	Sumitomo Construction Machinery Japan
		CX370B	275	Isuzu	36.2	Sumitomo Construction Machinery Japan
		CX470B	362	Isuzu	47.2	Sumitomo Construction Machinery Japan
		CX700B		Isuzu	69.6	Sumitomo Construction Machinery Japan
		CX800B	495	Isuzu	79.5	Sumitomo Construction Machinery Japan

Source: Company Information

### Table 26. CNH: Hydraulic Excavators Available in Europe, 2010 (continued)

Brand	Model	HP	Manufacturer	Service Weight (Tonnes)	Product Source
New Holland	E70BSR	56	Isuzu	8.1	Kobelco Japan
	E80B MSR	56	Isuzu	8.3	Kobelco Japan
	E135B	99	Mitsubishi	15.2	CNH San Mauro
	E135BSR	99	Mitsubishi	16.6	Kobelco Japan
	E150B	99	Mitsubishi	16.2	CNH Calhoun, USA
	E175B	126	CNH	18.4	CNH San Mauro
	E195B	126	CNH	19.8	CNH San Mauro
	E225B SR	158	Hino	23.0	Kobelco Japan
	E215B	158	CNH	23.0	CNH San Mauro
	E235B SR	131	Hino	25.0	Kobelco Japan
	E245B	160	CNH	25.4	CNH San Mauro
	E265B	160	CNH	28.2	CNH San Mauro
	E305B	207	CNH	31.5	CNH San Mauro
	E385B	284	Hino	37.2	CNH San Mauro
New Holland	E485B	351	Hino	50.3	CNH San Mauro
	E805	462	Isuzu	82.0	Sumitomo Construction Machinery Japan

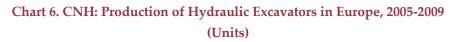
Source: Company Information

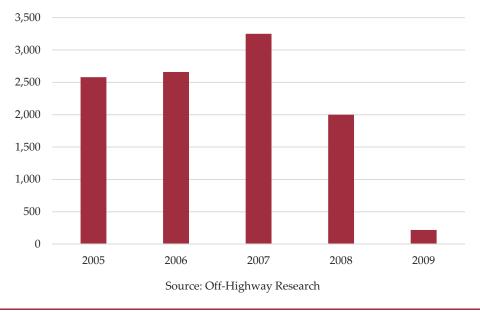
### PRODUCTION

# Table 27. CNH: Production of Hydraulic Excavators in Europe, 2005-2009(Units)

Туре	Country	2005	2006	2007	2008	2009
Wheeled	Germany	800	330	-	-	-
	Italy	200	280	1,160	930	60
	Total	1,000	610	1,160	930	60
Crawler	Italy	1,580	2,050	2,090	1,070	160
Grand Total		2,580	2,660	3,250	2,000	220

Source: Off-Highway Research





#### CNH Global Company Profile | December 2010 © Off-Highway Research. Contents confidential to the subscriber

Hydraulic excavator production fell by 31 per cent between 2003 and 2006 but expanded by 22 per cent in 2007. After that the decline of the European market in 2008 and its near disappearance in 2009 took a heavy toll and CNH had to adjust its European production facilities to the realities of the hydraulic excavator market.

The San Mauro plant in Italy is now the only source of CNH hydraulic excavators in Europe. Outside Europe, CNH produces crawler excavators in Calhoun in the USA, and Belo Horizonte in Brazil.

#### **COMPONENT SOURCING**

The sourcing pattern for the crawler excavators is influenced by the latest Kobelco technology, although apart from the hydraulic circuitry that is sourced from Kobelco in Japan, CNH prefers to manufacture most of its componentry in the plant or have it supplied from the best and most competitive sources. It mainly uses the new generation of CNH diesel engines, although for the 15 tonne model a Mitsubishi unit is in use and for the largest models Hino prime movers are used.

#### Table 28. CNH: Component Sourcing for Hydraulic Excavators in Europe, 2010

	Wheeled	Crawler
Engines	CNH	CNH, Mitsubishi, Hino
Hydraulic Pumps	Bosch Rexroth	Kawasaki
Travel Hydraulic Motors	Bosch Rexroth	Trasmital
Control Valves	Bosch Rexroth (up to 13 tonnes), In-house (rest)	Kawasaki
Axles	Compact up to 13 tonnes: Dana Spicer Standard above 13 tonnes: Carraro	-
Hydraulic Cylinders	In-house	In-house
Undercarriages	In-house	In-house
Track Parts	-	Berco
Cabs	Compact up to 13 tonnes: SIAC Standard above 13 tonnes: TIM	Kobelco
Buckets	Local suppliers	Local suppliers
Tyres	Various	-

Source: Off-Highway Research

#### SALES BY COUNTRY

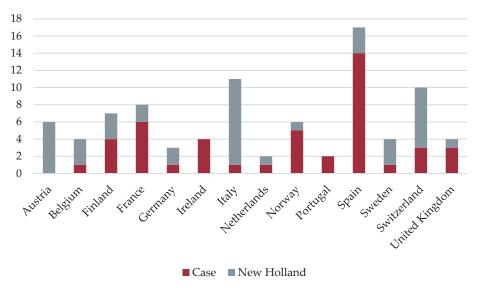
The wheeled excavator in Europe has a history of being concentrated in two major markets, Germany and France, and in the decade before the formation of CNH two thirds of the market was found there. CNH took on two leading brands in this product area, O&K of Germany and Case in France, so it was well placed. Market conditions, however, moved fast as Germany declined after the mid-1990s and the only producer that was based there and later did well was Liebherr. International competition focussed on the wheeled excavator market in the 1990s and now Liebherr, Caterpillar and Volvo account for half of the volume. New Holland typically accounts for about four per cent of the European wheeled excavator demand, while Case has three per cent.

## Table 29. CNH: Sales of Wheeled Excavators in Europe by Country and Brand,2009

		Units		0	% Market Share	
	Case	New Holland	Total	Case	New Holland	Total
Austria	-	9	9	-	6	6
Belgium	2	6	8	1	3	4
Finland	3	2	5	4	3	7
France	52	14	66	6	2	8
Germany	21	45	66	1	2	3
Ireland	1	-	1	4	-	4
Italy	2	25	27	1	10	11
Netherlands	3	3	6	1	1	2
Norway	7	1	8	5	1	6
Portugal	1	-	1	2	-	2
Spain	21	4	25	14	3	17
Sweden	2	5	7	1	3	4
Switzerland	7	17	24	3	7	10
United Kingdom	15	6	21	3	1	4
Total	137	137	274	3	3	6

Source: Off-Highway Research





Source: Off-Highway Research

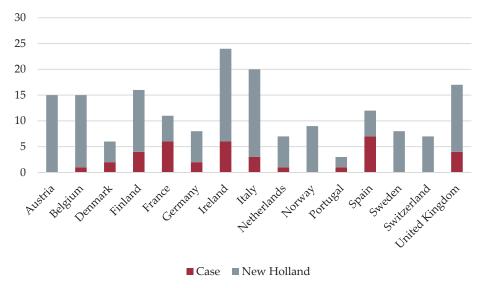
2009, the year shown above, was an extraordinary year in the construction equipment industry and the market figures for any manufacturer are likely to be untypical of past performance. Manufacturers were unwilling to compromise their dealer networks by overloading them with unsaleable inventory but in all parts of the distribution chain there were elements that had to sell products just to raise cash.

# Table 30. CNH: Sales of Crawler Excavators in Europe by Country and Brand,2009

		Units		0	% Market Share		
	Case	New Holland	Total	Case	New Holland	Total	
Austria	-	93	93	-	15	15	
Belgium	5	81	86	1	14	15	
Denmark	2	4	6	2	4	6	
Finland	12	36	48	4	12	16	
France	113	92	205	6	5	11	
Germany	49	139	188	2	6	8	
Ireland	7	20	27	6	18	24	
Italy	67	420	487	3	17	20	
Netherlands	4	18	22	1	6	7	
Norway	1	61	62	-	9	9	
Portugal	2	4	6	1	2	3	
Spain	28	20	48	7	5	12	
Sweden	-	22	22	-	8	8	
Switzerland	-	47	47	-	7	7	
United Kingdom	135	390	525	4	13	17	
Total	425	1,447	1,872	3	11	14	

Source: Off-Highway Research





Source: Off-Highway Research

New Holland typically accounts for about 10 per cent of the crawler excavator market in Western Europe, as it did in 2005 to 2008, and lies in fifth place behind Caterpillar, Komatsu, Hitachi and Volvo. It still has strong positions in Italy, Ireland, Austria and Scandinavia. Case has a much smaller share of about four per cent of the total with France and the United Kingdom being its strongest markets. Together, both companies would sell approximately 4,000 machines in an average year in

Western Europe, which represents 14 per cent of the industry total of just under 30,000.

## MINI EXCAVATORS

#### PRODUCT RANGE

Since 2003 CNH has been manufacturing mini excavators, based on the latest Kobelco technology at the plant in Imola, better known for production of backhoe loaders.

At present the Imola plant assembles standard and zero tailswing models, branded Case and New Holland, ranging from 1.5 to 4.8 tonnes. All models feature spacious, well appointed cabs, powerful track motors and a high flow pump system which results in fast cycle times.

Brand	Type	Model	HP	Manufacturer	Service Weight* (Tonnes)	Product Source
Case	Conventional	CX15Bs2	15	Mitsubishi	1.5	CNH Imola
		CX18Bs2	15	Mitsubishi	1.7	CNH Imola
	Zero Tail Swing	CX17B	15	Mitsubishi	1.6	Japan
		CX20B	22	Yanmar	2.2	CNH Imola
		CX22B	22	Yanmar	2.5	CNH Imola
		CX27B	22	Yanmar	2.6	CNH Imola
		CX31B	30	Yanmar	3.1	CNH Imola
		CX36B	30	Yanmar	3.7	CNH Imola
		CX40B	42	Yanmar	4.4	CNH Imola
		CX50B	42	Yanmar	4.8	CNH Imola
New Holland	Short Radius	E9SRB	8	Yanmar	1.1	Japan
	Conventional	E16B	15	Mitsubishi	1.6	CNH Imola
		E18B	15	Mitsubishi	1.7	CNH Imola
	Zero tailswing	E18SR	15	Mitsubishi	1.7	Japan
		E20.2SR	22	Mitsubishi	2.2	CNH Imola
		E22.2SR	22	Yanmar	2.4	CNH Imola
		E25.2SR	22	Yanmar	2.6	CNH Imola
		E30.2SR	30	Yanmar	3.1	CNH Imola
		E35.2SR	30	Yanmar	3.7	CNH Imola
		E40.2SR	43	Yanmar	4.3	CNH Imola
		E50.2SR	43	Yanmar	4.8	CNH Imola

#### Table 31. CNH: Mini Excavators Available in Europe, 2010

\* Canopy version

Source: Off-Highway Research

#### PRODUCTION

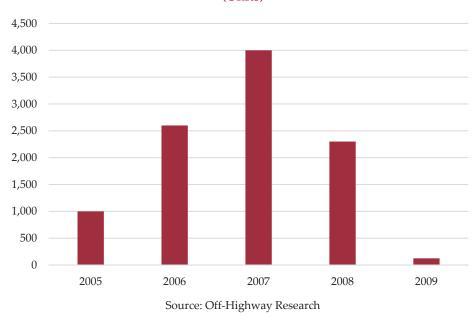
After a slow start, production volumes built up well after the introduction of a full range, and in 2006 to 2008 CNH accounted for seven per cent of total European production. In 2009 the mini excavator was particularly affected by a total loss of nerve on the part of European rental companies and although small contractors

carried on buying, there was no confidence to carry speculative stock. Hence the almost total stop in Imola and many other European factories.

# Table 32. CNH: European Production of Mini Excavators, 2005-2009(Units)

2005	2006	2007	2008	2009		
1,000	2,600	4,000	2,300	125		
Source: Off-Highway Research						

Chart 9. CNH: European Production of Mini Excavators, 2005-2009 (Units)



## **COMPONENT SOURCING**

Most componentry, including track drives and hydraulic circuitry, are shared with CNH's Japanese partner while diesel engines are sourced from Yanmar in Japan.

## Table 33. CNH: Component Sourcing for Mini Excavators, 2010

Engines	Yanmar
Track Drives	Nabco
Track Motors	Nabco, Kayaba
Hydraulic Pumps	Uchida
Hydraulic Cylinders	Yanagisawa
Cabs	MMT
Booms	Sub-contracted
Undercarriages	In-house
Tracks	Bridgestone, Avon

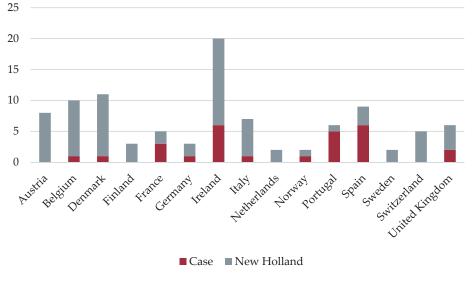
#### SALES BY COUNTRY

#### Table 34. CNH: Sales of Mini Excavators in Europe by Country and Brand, 2009

		Units		% Market Share			
	Case	New Holland	Total	Case	New Holland	Total	
Austria	-	26	26	-	8	8	
Belgium	5	70	75	1	9	10	
Denmark	5	55	60	1	10	11	
Finland	-	4	4	-	3	3	
France	137	100	237	3	2	5	
Germany	58	127	185	1	2	3	
Ireland	10	21	31	6	14	20	
Italy	82	420	502	1	6	7	
Netherlands	2	23	25	-	2	2	
Norway	3	6	9	1	1	2	
Portugal	11	2	13	5	1	6	
Spain	25	12	37	6	3	9	
Sweden	-	8	8	-	2	2	
Switzerland	-	76	76	-	5	5	
United Kingdom	210	275	485	2	4	6	
Total	548	1,225	1,773	2	4	6	

Source: Off-Highway Research





Source: Off-Highway Research

The CNH brands won six per cent of the European market in 2006 to 2008. For Case mini excavators the best markets were in France, Italy and Spain; while for New Holland valuable sales have been achieved in Italy and Denmark.

## **MOTOR GRADERS**

#### **MODEL RANGE**

#### Table 35. CNH: Motor Graders Available in Europe, 2010

Brand	Model	HP	Manufacturer	Weight (Tonnes)	Product Source
New Holland	F106.7/7A	135	CNH	11.5	CNH Berlin
	F156.7/7A	175	CNH	16.2	CNH Berlin
	,	2			

Source: Company Information

The CNH motor grader programme as a whole encompasses five models with horsepower ratings of 135 to 200, and operating weights of 11.5 to 17.2 tonnes but only two of them currently have engines corresponding to Stage IIIA and are thus saleable in the EU. The three largest models are produced in the CNH Belo Horizonte plant in Brazil but no longer exported to the New Holland dealers in Europe. They are also sold in North America under the New Holland and Case name and livery, where they comply with Tier 3 emissions norms.

The two smallest machines in the product line are manufactured at the CNH plant in Germany and are derived from O&K models. The CNH engine, installed in the graders since 2007 features engine dual power. When shifting from 3rd to 4th gear and up, the engine automatically delivers a higher power than on the first three gears, thus granting superior working performance.

They have a new cab, designed to offer operators more space and legroom, the new cab door folds back 180 degrees to provide a wide opening for comfortable access. A new right-hand console has been developed to enhance the control of gearshift and engine throttle, providing the best ergonomic set-up. The wider cab and larger glazed area ensure exceptional visibility from the driver's seat.

#### PRODUCTION

CNH Berlin factory is now the only source of motor graders in Europe. After the ending of the production of wheeled loaders and wheeled excavators there, the remaining 35 staff fulfil a purely assembly role. Although volumes are not high, they do represent more than half of all European production of motor graders.

## Table 36. CNH: European Production of Motor Graders, 2005-2009 (Units)

2005	2006	2007	2008	2009		
250	110	297	272	32		
Source: Off-Highway Research						

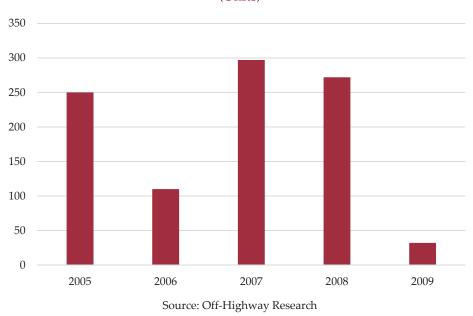


Chart 11. CNH: European Production of Motor Graders, 2005-2009 (Units)

#### **COMPONENT SOURCING**

In 2007, CNH switched from Deutz air-cooled diesel engines to the use of new CNH units, while Carraro axles have now been replaced by Graziano.

### Table 37. CNH: Component Sourcing for Motor Graders, 2010

Diesel Engines	CNH
Transmissions	ZF
Axles	Graziano
Hydraulic Pumps	Bosch Rexroth
Main Valve	Bucher
Chassis	Outsourced
Cabs	Brieda

Source: Company Information

#### SALES BY COUNTRY

Table 38. CNH: Sales of New Holland Motor Graders in Europe, 2009

	Units	% Market Share
Austria	17	89
Belgium	2	100
France	15	36
Germany	21	33
Italy	5	42
Spain	8	25
Total	68	32

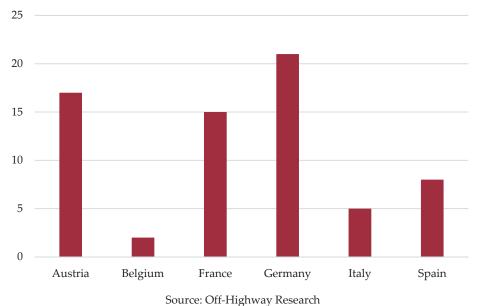


Chart 12. CNH: Sales of New Holland Motor Graders in Europe, 2009 (Units)

In the four years before the collapse of the market in 2009, New Holland was the second largest supplier of motor graders in Europe, after Caterpillar, with a market share of 30 per cent. During those years it led the market in Austria, Belgium, Germany and Italy.

## **SKID-STEER LOADERS**

#### PRODUCT RANGE

The company offers a total of 13 models; six are sold under the Case brand name and five under the New Holland name. Power ratings for Case models run from 60 to 82 horsepower covering the full operating capacity spectrum from 681 to 1,134 kilograms. The 435 and 445 are vertical lift types.

The company has been manufacturing skid-steer loaders since 1972, and over the years has produced in total more than 210,000 units. At present the CNH plant in Wichita, Kansas in the USA, is the company's only source of skid-steer loaders. New Holland's line is of a distinct design, with the loader arms pivoted much lower and at the side of the operator (the patented SUPER-BOOM design), whereas the Case design has a high pivot point behind the operator's head. The New Holland product was made for many years in Belleville, Pennsylvania but since 2002 it has come from the CNH plant in Wichita. The current range consists of seven models in the 38 to 82 horsepower range and 612 to 1,135 kilogram operating capacity. Since 2005 the Wichita plant produces compact track loaders for both CNH brands. The models distributed in EU are C175 and C185 for New Holland and 420CT, 440CT, 445CT and 450CT for Case.

The Wichita plant builds nearly 25 per cent of North America's output of skid-steer loaders. This is well behind the 45-50 per cent of Bobcat but is in second place. Although production fell to below 4,000 units in 2009, the plant has been boosted in 2010 by an order for 2,000 units for the US Army, which may be followed by a supplementary order for 1,400 units later.

Brand	Model	HP	Manufacturer	Operating Capacity (Kg)	Product Source
Case	410	60	ISM	680	CNH Wichita
	420	74	FPT	839	CNH Wichita
	430	82	FPT	907	CNH Wichita
	435	82	FPT	998	CNH Wichita
	440	90	CNH	998	CNH Wichita
	445	82	FPT	1,134	CNH Wichita
New Holland	L150	38	ISM	612	CNH Wichita
	L160	46	ISM	726	CNH Wichita
	L170	52	ISM	800	CNH Wichita
	L175	60	ISM	907	CNH Wichita
	L185	82	FPT	1,135	CNH Wichita

## Table 39. CNH: Skid-Steer Loaders Available in Europe, 2010

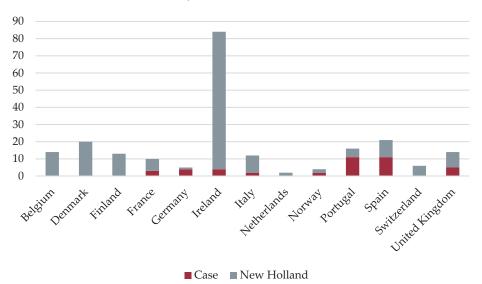
Source: Off-Highway Research

#### SALES BY COUNTRY

# Table 40. CNH: Sales of Skid-Steer Loaders in Western Europe by Country andBrand, 2009

	Units			% Market Share			
	Case	New Holland	Total	Case	New Holland	Total	
Belgium	-	29	29	-	14	14	
Denmark	-	9	9	-	20	20	
Finland	-	7	7	-	13	13	
France	15	29	44	3	7	10	
Germany	14	2	16	4	1	5	
Ireland	1	20	21	4	80	84	
Italy	28	155	183	2	10	12	
Netherlands	-	2	2	-	2	2	
Norway	1	1	2	2	2	4	
Portugal	21	10	31	11	5	16	
Spain	50	48	98	11	10	21	
Switzerland	-	6	6	-	6	6	
United Kingdom	70	80	150	5	9	14	
Total	200	398	598	5	9	14	

Chart 13. CNH: Sales of Skid-Steer Loaders in Western Europe by Country and Brand, (% Market Shares) 2009



Source: Off-Highway Research

The European market for skid-steer loaders is not large, nor is it growing noticeably, even when conditions are better. From 2005 to 2008 it would sell a little over 1,350 units in a typical year and win a market share of 12 per cent of total demand in the region. Both brands together are the second best seller after Bobcat's brand machines. For Case, Spain, UK and Italy are the best markets; while the New Holland brand did well in the Iberian Peninsula, Italy and Belgium.

## **TELESCOPIC HANDLERS**

#### MODEL RANGE

The agreement between New Holland and Manitou to market a range of telescopic handlers based on Manitou design and manufactured in France was signed in 1997. It was to serve the agricultural and construction markets and production was as high as 1,000 machines annually but eventually fell to around 500 units, limited to farm machinery specifications. In 2002 CNH started production of its own designed telescopic handlers for the construction equipment market. In mid-2007 Manitou's production for New Holland was stopped altogether and New Holland's farm machinery network started selling the CNH in-house telescopic handlers in Europe and North America.

The entire range of telescopic handlers is now manufactured in Case and New Holland livery at the CNH plant in Lecce. The Case range consists of eight models in the 3.4 to 4.5 tonne lift capacity sector with lift heights of up to 16.6 metres. The New Holland lines have now been extended to 10 construction models and three models for agriculture, with lower lift heights, in the 3.3 to 4.0 tonne lift capacity.

In addition, Case sells to the North American market rigid masted lift trucks manufactured at the CNH Burlington plant in Iowa.

# Table 41. CNH: Telescopic Handlers Available in Europe by Type and Brand,2010

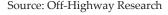
				Operating	Maximum Lift	Product
Brand	Model	HP	Manufacturer	Capacity (Tonnes)	Height (m)	Source
Construction	TX130	99-118	CNH UK	3.4	12.5	CNH Lecce
Case	TX140	118	CNH UK	4.5	13.6	CNH Lecce
	TX170	118	CNH UK	4.5	16.6	CNH Lecce
New Holland	LM732	99	CNH UK	3.2	7.1	CNH Lecce
	LM1133	99	CNH UK	3.3	10.6	CNH Lecce
	LM1333	99	CNH UK	3.3	13.0	CNH Lecce
	LM1340	118	CNH UK	4.0	12.3	CNH Lecce
	LM1343	118	CNH UK	4.3	12.5	CNH Lecce
	LM1345	118	CNH UK	4.5	12.5	CNH Lecce
	LM1443	118	CNH UK	4.3	13.6	CNH Lecce
	LM1445	118	CNH UK	4.5	13.5	CNH Lecce
	LM1745	118	CNH UK	4.5	16.6	CNH Lecce
Agricultural	LM5040	120	CNH UK	3.5	6.1	CNH Lecce
New Holland	LM5060	120	CNH UK	4.0	7.1	CNH Lecce
	LM5080	120	CNH UK	3.3	9.6	CNH Lecce

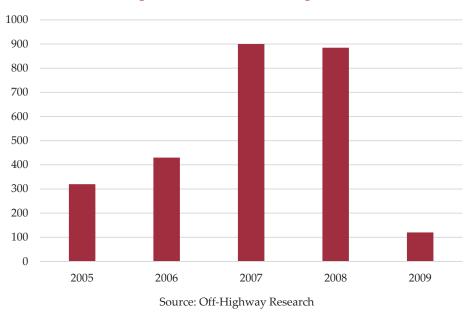
Source: Off-Highway Research

#### PRODUCTION

#### Table 42. CNH: European Production of Telescopic Lift Trucks, 2005-2009

2005	2006	2007	2008	2009			
320	430	900	885	120			
Source: Off Highway Research							





#### Chart 14. CNH: European Production of Telescopic Lift Trucks, 2005-2009

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At its highest point, CNH production of telescopic handlers accounted for only two per cent of the European total. The telescopic handler as a market seemed attractive in the mid 1990s and indeed European production grew spectacularly after 1995 from 17,000 to 45,000 units but it has proved very hard to master the distribution aspect. Diverse entrants into the market, including CNH, have found it very challenging to sell products to industry, construction, rental and farming simultaneously. The result has been that three established leaders have kept their share of the business at 72 per cent for more than 10 years. The remainder of the market has become very crowded and volumes in that area have often been disappointing.

## COMPONENT SOURCING

### Table 43. CNH: Component Sourcing for Telescopic Handlers, 2010

Diesel Engines	CNH
Hydraulic Pumps	Casappa
Transmissions	Dana Spicer
Axles	Dana Spicer
Cabs	SIAC
Chassis	In-house

Source: Off-Highway Research

All engines are emission-compliant CNH; axles and powershift transmissions are from Dana Spicer while hydraulic gear pumps are sourced from Casappa.

#### SALES BY COUNTRY

# Table 44. CNH: Sales of Telescopic RTLTs in Europe by Country and Brand,2009

	Units			% Market Share			
	Case	New Holland	Total	Case	New Holland	Total	
Belgium	-	4	4	-	1	1	
France	3	97	100	-	2	2	
Germany	4	22	26	-	2	2	
Ireland	-	7	7	-	6	6	
Italy	-	18	18	-	1	1	
Netherlands	-	1	1	-	-	-	
Portugal	6	1	7	5	1	6	
Spain	3	9	12	1	2	3	
United Kingdom	-	10	10	-	-	-	
Total	16	169	185	-	1	1	

## WHEELED LOADERS

#### **PRODUCT RANGE**

#### Table 45. CNH: Wheeled Loaders Available in Europe, 2010

Brand	Туре	Model	HP	Manufacturer	Product Source
Case	Compact	21E	50	Iveco-Case	CNH Imola
	<u>,</u>	121E	60	Iveco-Case	CNH Imola
		221E	69	Iveco-Case	CNH Imola
		321E	77	Iveco-Case	CNH Imola
	Standard	521E	123	Case	CNH Lecce
		621E	138	Case	CNH Lecce
		721E	169	Case	CNH Lecce
		821E	195	Case	CNH Lecce
		921E	262	Cummins	CNH Lecce
		1221E	320	Cummins	Korea
New Holland	Compact	W50	51	CNH	CNH Imola
		W60	60	CNH	CNH Imola
		W70	68	CNH	CNH Imola
		W80	76	CNH	CNH Imola
	Standard	W110B	121	CNH	CNH Lecce
		W130B	150	CNH	CNH Lecce
		W170B	197	CNH	CNH Lecce
		W190B	227	CNH	CNH Lecce
		W270B	270	Cummins	CNH Lecce

Source: Company Information

At one time Case sold larger wheeled loaders from its plant in Fargo, North Dakota, USA in Europe but in 2003 production for the European market was transferred from the Fargo plant to the CNH plant in Lecce. From 2001 to 2007 they were joined by four compact hydrostatic models supplied from the CNH plant in Berlin, Germany, then production moved to the CNH plant in Imola, Italy.

New Holland offers 11 models, with the four compact loaders being manufactured in Imola and carrying hydrostatic drives and CNH diesel engines. The standard size products come, as before, from Lecce.

#### PRODUCTION

# Table 46. CNH: European Production of Wheeled Loaders by Type and Country,2005-2009 (Units)

	2005	2006	2007	2008	2009
Under 80 hp					
– Germany	515	210	-	-	-
– Italy	-	-	870	300	52
Over 80 hp					
– Italy	790	770	1,300	825	73
Total	1,305	980	2,170	1,125	125
	C	Off II: James	D 1		

CNH's wheeled loader production is divided between two manufacturing sites in Italy until 2011. The main wheeled loader factory in Lecce produced a peak volume of 1,300 machines in 2007, equivalent to six per cent of Europe's total production. That year also marked the transfer of compact loader production from Berlin to the CNH Imola plant. Imola builds four Case and four New Holland models in the 54 to 76 horsepower class. It built 870 units in 2007 at its peak but this was only five per cent of European production in this size.

In 2011 production will cease at Imola and the compact products will come instead from the Lecce plant.

#### **COMPONENT SOURCING**

For its Case and New Holland branded wheeled loaders, CNH now uses the same diesel engines for both ranges of compact machines but uses different names for them. For larger models Case uses a Case engine, while New Holland employs CNH units that meet the Stage IIIA emission requirements. The two largest New Holland models still utilise Cummins engines. Hydrostatic transmissions for Case and New Holland compact models incorporate Bosch Rexroth components, while for the largest models ZF powershift transmissions are used. Axles are sourced from Carraro and ZF, while cabs are supplied by CNH Modena.

	Case	New Holland
Diesel Engines	Compact: Iveco-Case	Compact: CNH
	Others: Case	Others: CNH, Cummins
Transmissions	Hydrostatic: Bosch Rexroth	Hydrostatic: Bosch Rexroth
	Powershift: ZF	Powershift: ZF
Axles	Compact: Carraro	Compact: Carraro
	Others: ZF	Others: ZF
Hydraulic Pumps	Bosch Rexroth	Bosch Rexroth
Hydraulic Cylinders	CNH	CNH
Cabs	CNH Modena	CNH Modena
Steelworks	CNH or Sub-contracted	CNH or Sub-contracted
Tyres	Goodyear, Michelin	Goodyear, Michelin

#### Table 47. CNH: Component Sourcing for Wheeled Loaders, 2010

Source: Off-Highway Research

#### SALES BY COUNTRY

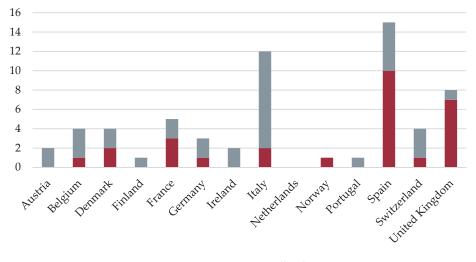
2009 is a very bad year for judging the state of the wheeled loader market in Europe. A year earlier, when sales were much healthier, the two CNH brands sold more than 1,100 units and won five per cent of the market. Case and New Holland are minor players in all markets except Italy, where New Holland has a following; and Spain where Case once had a wheeled loader manufacturing plant and the dealers still see themselves as competitive suppliers and New Holland has a first class dealer network.

	Units			% Market Share		
	Case	New Holland	Total	Case	New Holland	Total
Austria	-	6	6	-	2	2
Belgium	2	10	12	1	3	4
Denmark	5	8	13	2	2	4
Finland	-	5	5	-	1	1
France	35	23	58	3	2	5
Germany	47	98	145	1	2	3
Ireland	-	1	1	-	2	2
Italy	19	116	135	2	10	12
Netherlands	2	2	4	-	-	-
Norway	2	1	3	1	-	1
Portugal	-	1	1	-	1	1
Spain	28	16	44	10	5	15
Switzerland	6	11	17	1	3	4
United Kingdom	56	5	61	7	1	8
Total	202	303	505	2	2	4

#### Table 48. CNH: Sales of Wheeled Loaders in Europe by Country and Brand, 2009

Source: Off-Highway Research





Case New Holland

Source: Off-Highway Research

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