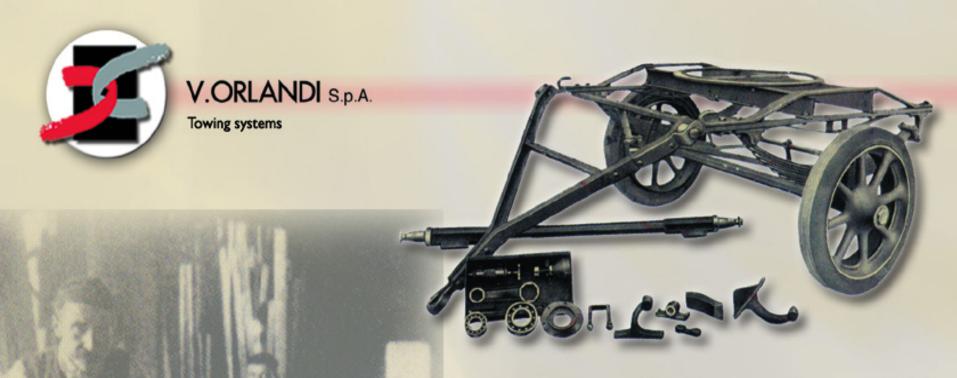
Presentation & EQUIPMENT



by Gianpietro Mascialino

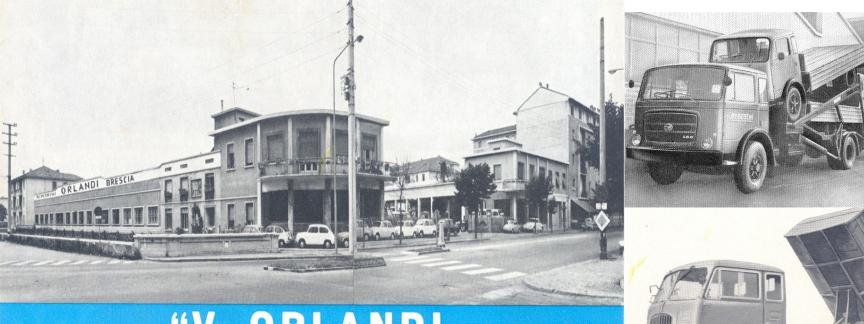


V.ORLANDI S.p.a. TOWING SYSTEMS SINCE 1859



V. Orlandi, a pacemaker in transport history since 1859

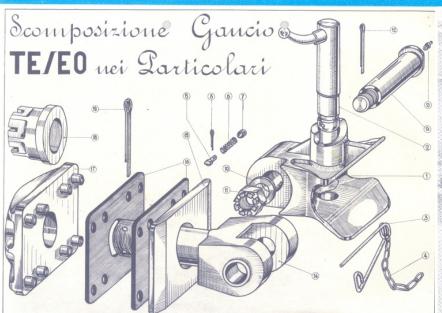




RIMORCHI "V. ORLANDI,, BRESCIA

SOCIETÀ PER AZIONI

Sede - Direzione - Officine: BRESCIA - Corso D. D'Aosta, 28/30 🕿 59.3.22







1. Company profile WHERE ARE WE?

40 km – BERGAMO Arpt.

50 km – VERONA Arpt.

120 km – MILANO LINATE Arpt.

150 km – MILANO MALPENSA Arpt.

150 km – VENEZIA Arpt.





Main offices

_

Production

-

Testing room

V.ORLANDI S.p.a.
Via Quinzano 3
25022 Flero, Brescia

1. Company profile FIRST FACILITY





We are one of the very few European Companies having at our disposal a TUV approved testing machine.

Addressed mainly to drawbar couplings, drawbar eyes and towbars.

Capacity up to 250 kN

.

All our products do 2.000.000 of cicles

An example of a MAN cross member during the test; most of the European OEMs comes to our facility to do stress tests on their new tow-bars.

Agenda

1. Company profile INTERNAL TESTING ROOM





Fifth wheels dynamic tests are done in Europe in cooperation with Automotive Industry Institute PIMOT

Dynamic tests are done according to existing EC or ISO regulations (94/20/CE and ECE R-55 standard)

The forces to be used in the test are calculated and specified in international regulations (UN ECE R55.01)

An example of the test of our 3,5" fifh wheel (RP90): we successfully reached the higher rating in the market.

1. Company profile EXTERNAL TESTING ROOM







Painting -

Assembly line

Logistic

Capacity:

15.000 drawbar couplings

5.000 fifth wheels

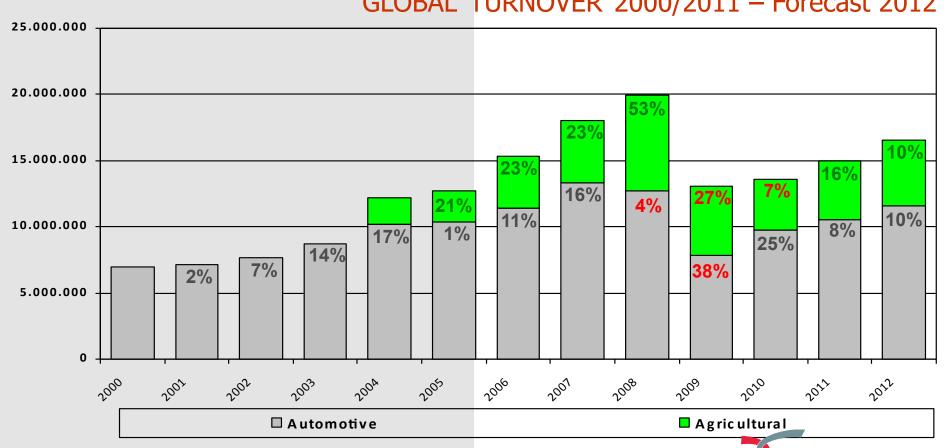
1. Company profile SECOND FACILITY





1. Company profile

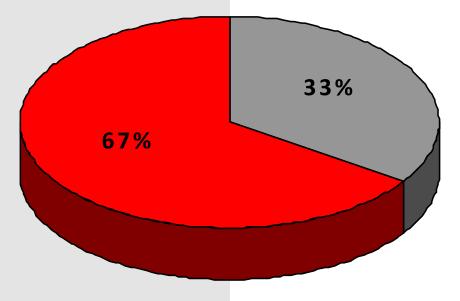
GLOBAL TURNOVER 2000/2011 - Forecast 2012





1. Company profile TURNOVER OEM vs AFTER MARKET

"OEM"
includes the sales to
assembly line of main
European truck
builders.



"After market" includes the sales to body builders, dealers, fleets, workshops, ...

■ OE M

After Mkt





















Purchased in 2004 by V.ORLANDI Spa,

the business of Agricultural towing devices in mainly addressed to OEMs

and it is characterized by an high customisation of the products as well as an high quality background.



















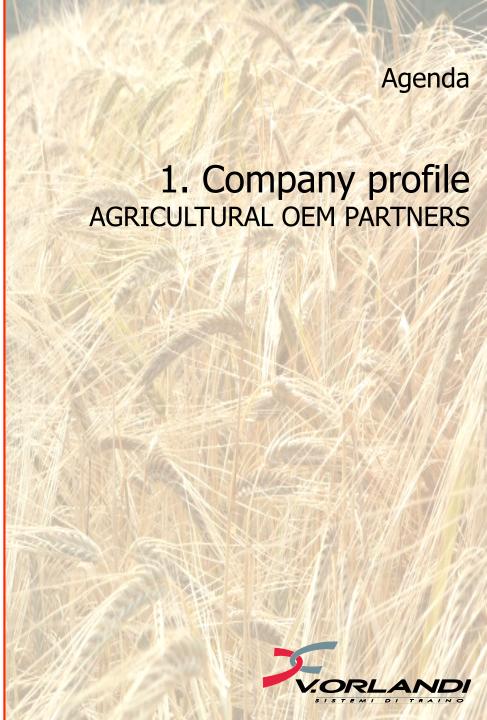












1. Company profile AGRICULTURAL TURNOVER 2006/2011 - Forecast 2012









European Union

94/20/CE

-

NATO

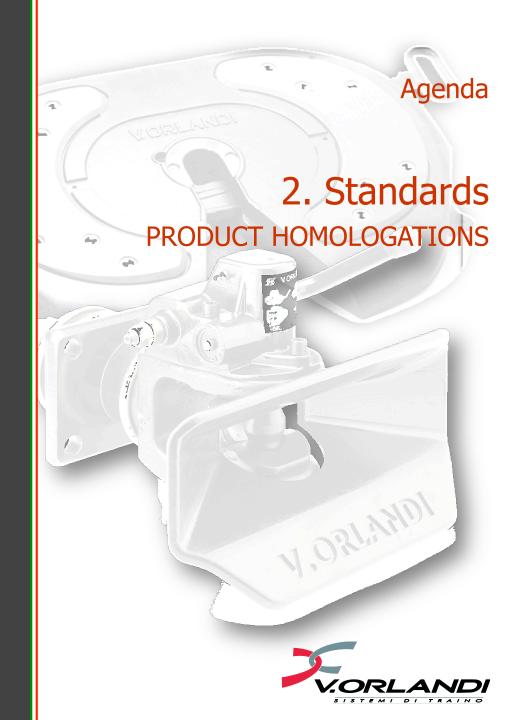
ECE-ONU R55

-

Australia

ADR 62/01

Australian & NZ Standards 2174, 2213 and 4968







3. Pacific series ROAD TRAIN DRAWBAR COUPLINGS

V.ORLANDI

dedicate special range of products to special markets around the world

An example of range of product dedicated to the Pacific Area





E 50 PACIFIC

Automatic/Rigid 50mm pin diameter coupling













EH 524

Automatic/High oscillating 50mm pin diameter coupling

Only AUSTRALIA has tipper over-axle trailers

















UN 76
Hook Coupling Automatic
Suitable for toroidal drawbar eyes











TITANO

H.D. Coupling Manual Suitable for 50mm H.D. drawbar eyes

50mm - 250 tons

70mm - 500 tons





Agenda

3. Pacific series MINING DRAWBAR COUPLINGS

CUNA





V.Orlandi couplings are designed in order to be upgraded by an important system of complementary kits being able to satisfy the most peculiar requirements of our customers to make the use of couplings even more confortable and safe also in the most extreme conditions.







MECHANICAL



PNEUMATIC









IN-CABINE INDICATORS

Open-close





Steering angle



In-cabine



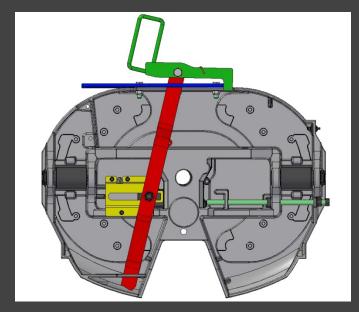






RP50 FRONT RELEASE

Only AUSTRALIA has roll-back trailers





Agenda 3. Pacific series 2'' ROLL-BACK FIFTH WHEELS

94/20/CE -CRN





RP 50 on rubber bearings

with standard or low-lube plate ISO pedestal

H 150mm – 185mm









RP 50 on pivot bearings

Standard or low-lube plate ISO pedestal

H 150mm – 185mm H 140 with weldable feet



Agenda

3. Pacific series
2'' FIFTH WHEELS ON PIVOT

94/20/CE

ECE R-55

CRN





FHD series

with standard or low-lube plate

U-Value: 18 tons; D-Value: 120 kN

H from 167 mm to 367 mm



Agenda

3. Pacific series DOUBLE HEIGHT 2" FIFTH WHEEL

ECE R-55





RP 90 on rubber bearings

Standard plate

Convertible kit available (2" - 3,5")

ISO pedestal H 190mm – 250mm











RP 90 – Advantages

10% more than the higher values in the market:

Vertical Load U: 40 Tons

Test values reached:
lifting static force (upward) is
U*1.6*g=628kN
(APPROX 63 TONS),
and the dynamic vertical load (downward)
is min 157 and max 471 kN
(APPROX 47 TONS)









Saving some dollars with non genuine parts means:

No more quality guaranteed

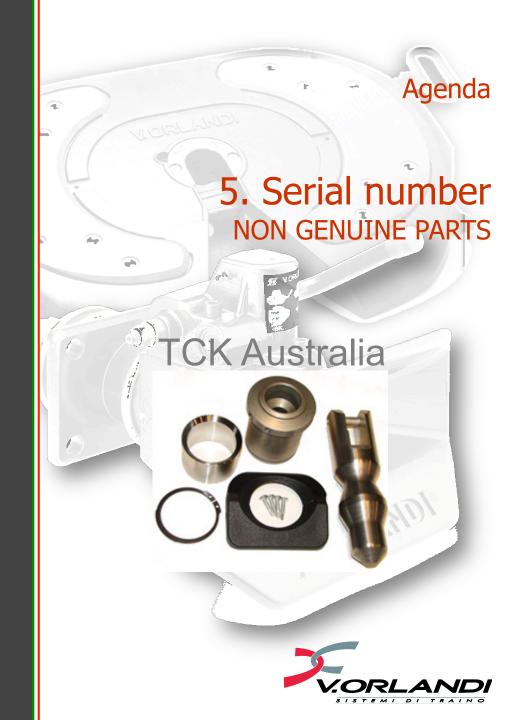
No more safety

No more D-Value

No more insurance

No more recalling action

Is it worth it?





6. The future ONE CONTACT







Status of development and intended industrialisation

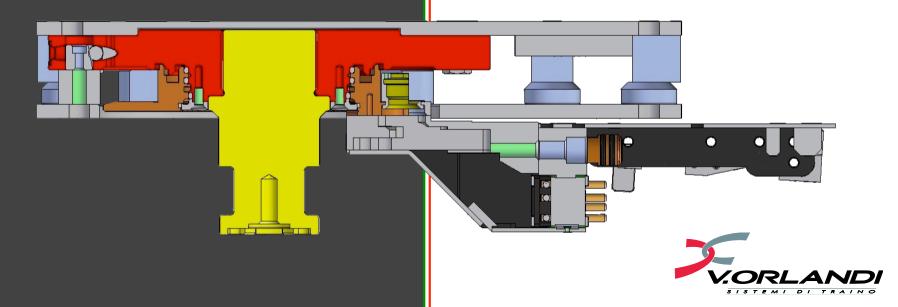
Except for the electric and pneumatic connections, the project is at "field test" and industrialisation stage.

Patents, utility patents, other property rights

The patent does not involve the connection as such, but the connection of signal transfer from the connection to the semi trailer.

Agenda

6. The future ONE CONTACT





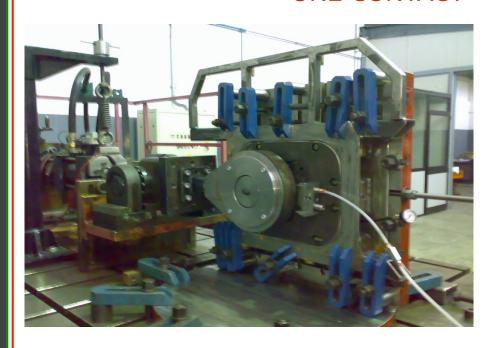
Conformity to actual standards like

EG 94/20, ECE55

The king pin is H50 (ISO 337) class and complies with the test requirements.

Agenda

6. The future ONE CONTACT







6.

Agenda

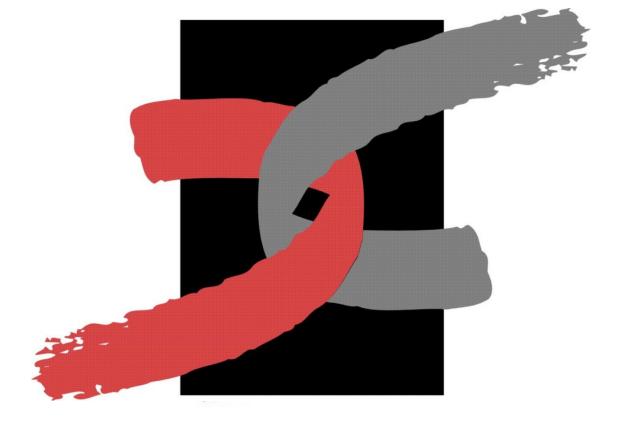
6. The future ONE CONTACT

Function, operation and safety Standard use – fully automated

With the condition of hitched semi trailer, the driver, through a key turns ON the control panel.







V.ORLANDI SISTEMI DI TRAINO

THANKS FOR YOUR KIND ATTENTION!

GRAZIE PER LA VOSTRA ATTENZIONE!