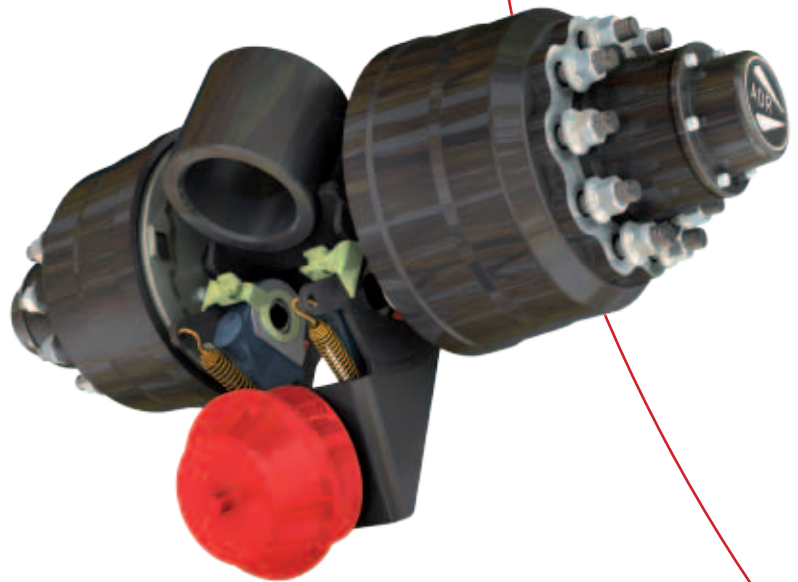


SWINGING AXLES: CONCENTRATED POWER





Swinging axles are the best solution for heavy duty vehicles on extreme uneven ground.

> Flexibility through a rigid and stiff structure defines this high performance product, always ensuring optimum ground contact. This means high operator safety and optimum load distribution in all travel conditions. Swinging axles by ROADRANGE mean reliable, strong and easily maintained technology, with optimised use of space giving the advantage of increased volume for transportation

> Main characteristics and advantages.

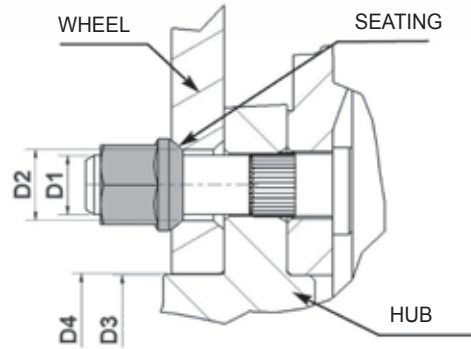
- Carrying capacity up to 20 ton.
- 17,5" wheel fitting.
- Solid construction for toughest applications.
- Longlife maintenance system.
- Bronze bearing swinging with optimized lubrication system.
- ABS, automatic slack adjusters and bi-directional versions available on request.



ASSEMBLY AND FIXING OF THE WHEELS

DIN NUT

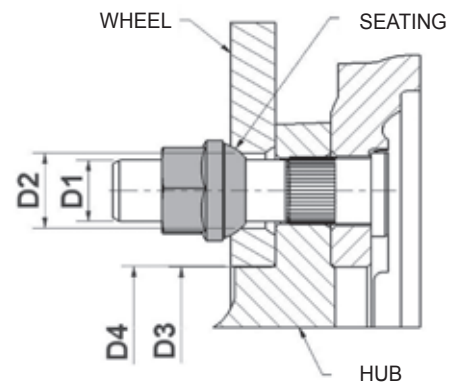
Stud Holes must be countersunk to set the spherical base of the nut DIN. The tightening is between spherical base of the nut and the countersunk hole.



SPANNER	P.C.D.	WHEEL STUD	TIGHTENING			LEVERAGE	FORCE	HOLE RIM	HUB	INNER RIM
mm	mm	D1 (mm)	Nm			L (mm)	F kg	Ø D2 (mm)	Ø D3 (mm)	Ø D4 (mm)
24	6 x Ø205	M18x1,5	270	0	+20	450	60	21,5	160	161
24	8 x Ø275	M20x1,5	270	0	+20	450	60	21,5	220	221

H NUT + WASHER

Stud Holes must be countersunk to set the spherical base of the nut DIN. The tightening is between spherical base of the nut and the countersunk hole.

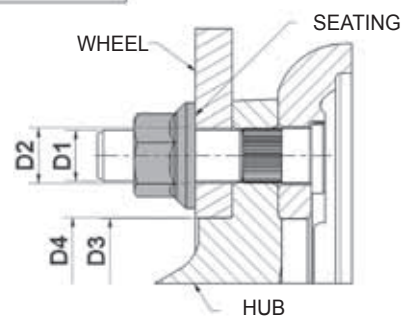


SPANNER	P.C.D.	WHEEL STUD	TIGHTENING			LEVERAGE	FORCE	HOLE RIM	HUB	INNER RIM
mm	mm	D1 (mm)	Nm			L (mm)	F kg	Ø D2 (mm)	Ø D3 (mm)	Ø D4 (mm)
30	8 x Ø275	M20x1,5	350	0	+30	600	60	27	220	221
30	10 x Ø335	M22x1,5	450	0	+60	800	60	27	280	280

ASSEMBLY AND FIXING OF THE WHEELS

DADO RUOTA TIPO M

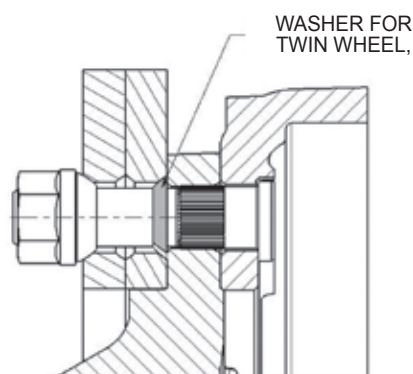
Studs holes must not be countersunk. The wheel locate by the hubs reference diameter and the tightening by the flat revolving part of the nut (see wearing on sketch). Do not forget to set bushes item. 1, to reduce the gap between the stud and the rim hole.



SPANNER	P.C.D.	WHEEL STUD	TIGHTENING			LEVERAGE	FORCE	HOLE RIM	HUB	INNER RIM
mm	mm	D1 (mm)	Nm			L (mm)	F kg	Ø D2 (mm)	Ø D3 (mm)	Ø D4 (mm)
28	8 x Ø275	M18x1,5	270	0	20	450	60	21	220,5	221
32	10 x Ø225	M22x1,5	450	0	60	800	60	26	175,5	176
32	10 x Ø335	M22x1,5	450	0	60	800	60	26	280,8	281

TWIN WHEELS

For the twin wheels fitting, what even the use of nut type, French of H + washers, you must insert between hub face and first rim, a locating split spherical washer fully in the countersunk, the wearing face of the rim must be in total contact with hub face.



TIGHTENING AND RETIGHTENING WHEEL NUTS (SUMMARY):

Never use impact wrenches to tighten the wheel nuts as the impact torque may be excessive. Wheel nuts should be tightened diagonally using a torque wrench. If power tools are used (for example, pneumatic torque wrench) they must be carefully set to the required torque for tightening. Otherwise, the studs and wheel nuts may be overtightened which may damage or break them.

Retighten the wheel nuts after:

- The first time of use.
- The first laden journey.
- The first 1,000 km.
- Every 6 months or 25,000 km.

Repeat every time the wheels are changed or removed.