Wheels and castors

Introduction and general information

Choice of wheel based on floor material

Good Acceptable Not recommended

	Gres	Carpet	Parquet floor	Concrete	Asphalt	Metal shavings
Polyamide 6	😐	☺	☹	☺	☹	☹
Rubber	☺	😐	☺	☺	☹	☹
Polyurethane	☺	☺	☹	☺	☺	☹

- ***A castor comprises a wheel and a support bracket.***
- *The choice of material for the wheel depends on the surface on which it will be used and the general environment. The shape of the support depends on the type of movement required. The greater the wheel diameter, the easier the movement will be.*
- *The castors offered by HPC have a smooth hub,which makes them suitable for a very wide range of applications; typically moving medium loads at low speed over short distances. The castor rotates directly on an axis. In order to facilitate rotation and increase the service life, it will be necessary to lubricate the shaft regularly. On request, castors can also be supplied with bearings (minimum quantity applies).*

Wheel materials

- ***Rubber:***
  - *Medium load capacity*
  - *Absorbs vibration, shock and noise*
  - *Does not damage the running surface*
  - *Medium rolling resistance*
- ***Polyamide 6 :***
  - *High load capacity*
  - *Good impact resistance*
  - *Does not absorb vibrations*
  - *Low rolling resistance, requires more effort at start*
- ***Polyurethane :***
  - *High load capacity*
  - *Ease of movement*
  - *Silent*
  - *Resists absorption and many chemical agents*

$$\text{Max load} = \frac{P+M}{N^\circ \text{ of castors}} \times S$$

P = Weight of trolley
M = Max weight to be moved
S = Factor of Safety
(Normally between 1.3 and 2)