

PLASTIC SHEAVES

CALCULATION QUESTIONNAIRE



WIRE ROPE SHEAVES

Precision-machined from high-performance thermoplastics, **Dotmar sheaves can deliver 2-3 times the service life of traditional steel alternatives.** Their low-friction surface reduces heat and wear, **extending rope life by 2-6 times** while eliminating issues related to corrosion, galling, and lubrication.

Lightweight, dimensionally stable, and acoustically dampening, these sheaves are ideal for high-duty-cycle lifting and industrial applications. Manufactured in-house to exacting tolerances, Dotmar's plastic sheaves are the proven solution for reduced maintenance and increased system longevity.

OUR COMMITMENT TO YOU

Dotmar is a trusted partner to Australia's crane, lifting, and heavy equipment sectors—supplying engineered plastic components that outperform traditional materials in demanding environments. Our advanced machining capabilities and proven material range deliver precision, durability, and performance where it matters most.

Engineered to perform. Trusted to support.



CRANE SHEAVES

QUOTE REQUEST FORM

Company

Address

City/Suburb

State

Post Code

Contact

Phone

Email

Type of Equipment

☐

Crane

☐

Elevator

☐

Other, Specify:

Dynamic Load

☐

Yes

☐

No

Static Load

☐

Yes

☐

No

If Yes, No. of Hours

Hours

Rope Diameter

mm

Normal working load

tons

Hours/day

(Rope pulley face)

Ultimate Breaking
Strengths

tons

Peak Load of Rope

tons

Times/day

Working Temperature

C

Relative Humidity

%

Sheave Groove

mm

Diameter

Desired Bearing Make:

Type:

Width Of Bore

mm

Quantities

Annual Consumption

Which Material

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CRANE SHEAVES

QUOTE REQUEST FORM

Groove Angle

Groove Angle

 $\alpha =$

Fleet Angle
----->
Groove Angle

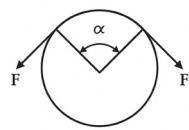
0 - 4 °

> 4 - 7 °

$\alpha =$
 $\alpha =$

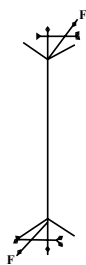
45 °

Contact Angle
Between Rope &
Sheave Groove

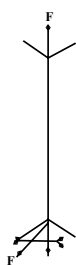

 $\alpha =$

60 °

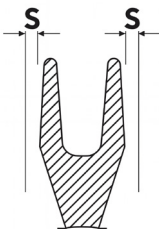
Fleet angles
(side loads)


 $\chi =$


 $\alpha =$


 $\alpha =$

Free space between
sheave & steel frame

$S =$ mm

 mm