

# 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

## CALCULATION REQUEST FORM

Company			
Address		City/Suburb	
		State	
		Post Code	
Contact			
Phone			
Email			

Type of Equipment	<input type="checkbox"/> Crane	<input type="checkbox"/> Elevator	<input type="checkbox"/> Other, Specify:		
Dynamic Load	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
Static Load	<input type="checkbox"/> Yes	<input type="checkbox"/> No	If Yes, No. of Hours	<input type="text"/>	Hours
Rope Diameter	<input type="text"/>	mm			
Normal working load	<input type="text"/>	tons	<input type="text"/>	Hours/day	
(Rope pulley face)					
Ultimate Breaking Strengths	<input type="text"/>	tons			
Peak Load of Rope	<input type="text"/>	tons	<input type="text"/>	Times/day	
Working Temperature	<input type="text"/>	C			
Relative Humidity	<input type="text"/>	%			
Sheave Groove Diameter	<input type="text"/>	mm			
Desired Bearing Make:	<input type="text"/>				
Type:	<input type="text"/>				
Diameter of Bore	<input type="text"/>	mm			
Loaded Bore Width	<input type="text"/>	mm			
Quantities	<input type="text"/>				
Annual Consumption	<input type="text"/>				
Which Material	<input type="text"/>				

*Continued on Page 3*

# CRANE SHEAVES

## CALCULATION REQUEST FORM

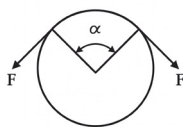
Groove Angle

Groove Angle



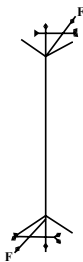
$\alpha =$

Contact Angle  
Between Rope &  
Sheave Groove



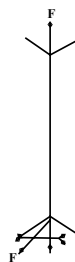
$\alpha =$

Fleet angles  
(side loads)



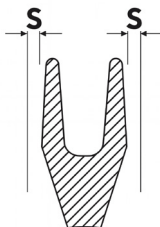
$\chi =$

$\alpha =$



$\alpha =$

Free space between  
sheave & steel frame



**S = mm**

mm