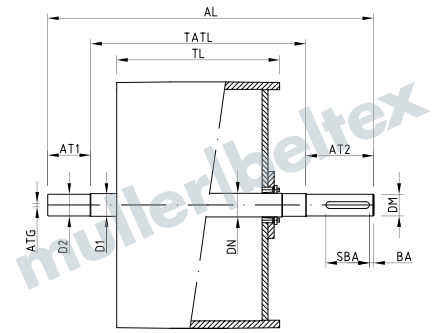


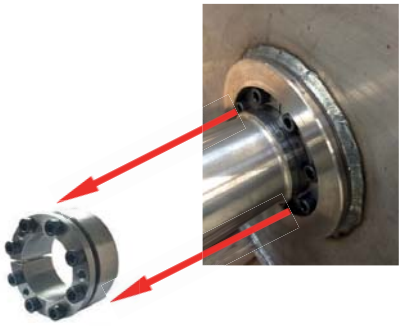
DRIVE AND RETURN PULLEYS

Drive and return pulleys should be properly constructed and be suitable for the type of elevator belt used and the type of product handled.

the pulleys are the only contact areas between the elevator belt and the main equipment. The total weight of elevator belt, buckets and product is supported by the drive pulley. This causes a high surface pressure on the elevator belt section in contact with the pulley. This pressure combined with the drive power has a wearing effect on the elevator belt.

The return pulley functions as a tensioning pulley and also excercises a high pressure on the elevator belt. Both pulleys should be properly constructed to avoid undue wear to the belt.

Shaft showing with 1 step juvenation and with keyway



Shaft to drive pulley attachment by taper locking device

DRIVE PULLEY

The drive pulley of a bucket elevator should preferably be a closed pulley offering maximum support for the elevator belt and exercising maximum grip on the elevator belt. Because of the potential problem of belts wandering (off-tracking) in practise drive pulleys are usually equipped with a crown. In general terms, a crown on a pulley should be flat in the centre and should be sloping down towards the rim of the pulley. Please consult a Muller Beltex engineer on the crowing of pulleys.

Obtaining a quotation for a drive pulley
To obtain a quotation for a drive pulley, please complete below drawing No.12.00.61 and return it to your Muller Beltex representative.

Please also mention the following 5 points:
- Material of the drive pulley and shaft
- Shaft / drive pulley connection: welded or taper locking device
- Shaft details e.g.: keyway, rejuvenations and shaft mortise
- Pulley lagging: Slide-Lag rubber, vulcanised rubber or heat resistant pulley lagging
- Surface treatment e.g.: protective coating, paint.

Close up of crowning on drive pulley surface

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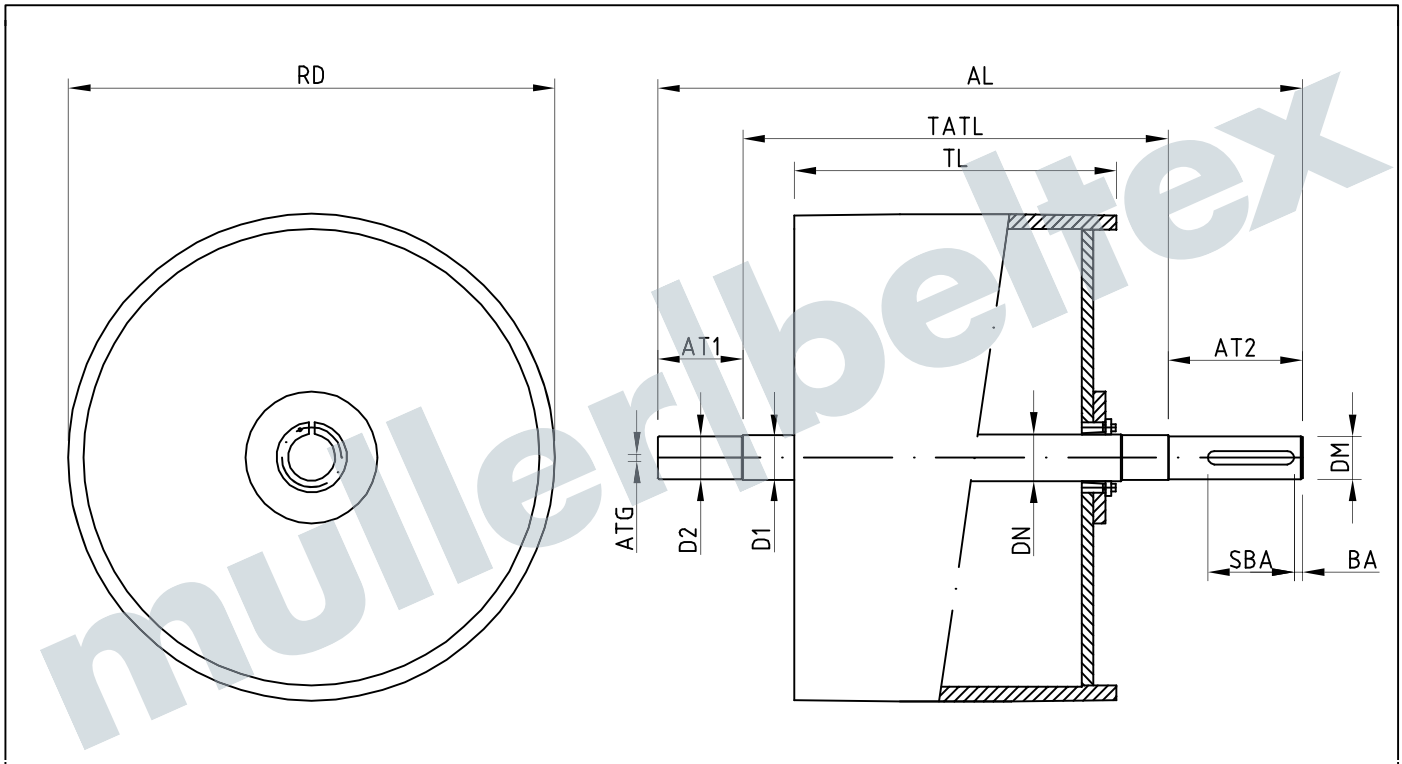
DRIVE PULLEY



DM					
D2		AL			
D1		TATL		Shaft / Pulley connection	
DN		BA		Crowning	
TL		SBA		Lagging	
RD		AT2		Coating	
ATG		AT1		Material	

American projection

Drive pulley

Remarks:

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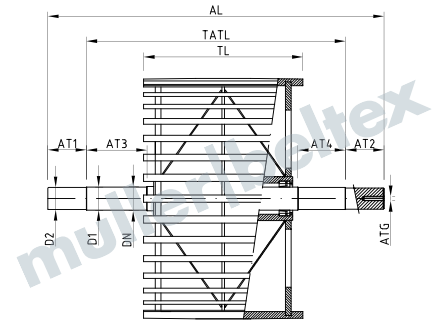


BAR PULLEY

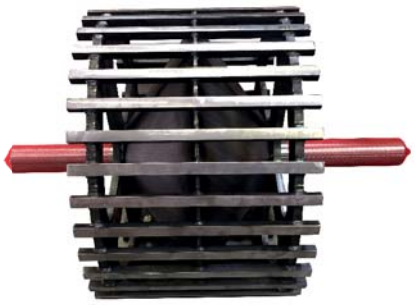
The return pulley in bucket elevators should be an open type pulley allowing product to pass through its surface. The bar pulley should preferably have an internal double cone to release trapped product sideways. In order to offer the elevator belt sufficient support, flat bars are recommended instead of round bars and the pitch between the bars should be as small as possible, but large enough to allow the conveyed product to pass through the gap. The bar style return pulley is the pulley of choice when handling powders and granulates.

Obtaining a quotation for a bar pulley

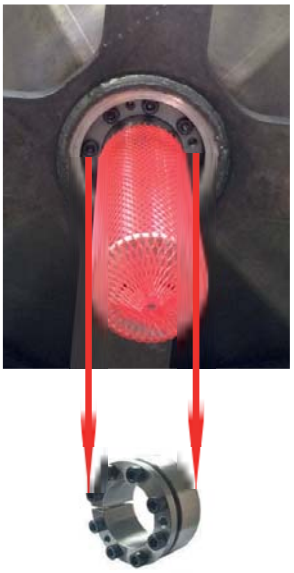
To obtain a quotation for a bar pulley, please complete below drawing No.12.00.62 and return it to your Muller Beltex representative.

Please also mention the following 4 points:

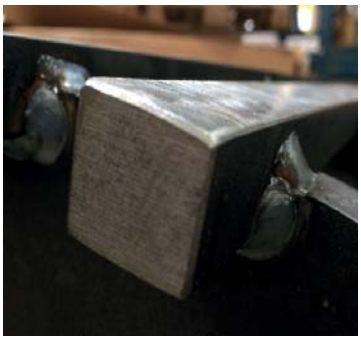
- Material of the bar pulley and shaft
- Shaft / bar pulley connection: welded or taper locking device
- Shaft details e.g.: keyway, rejuvenations and shaft mortise
- Surface treatment e.g.: protective coating, paint.



Bar pulley with internal double cone showing



Shaft to bar pulley attachment by taper locking device



Close up of finished steel bar

Shaft showing with 2 step juvenation and with keyway

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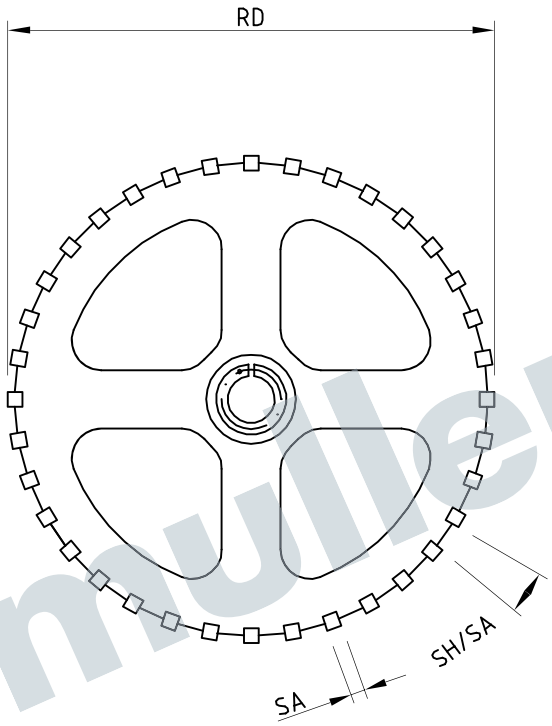
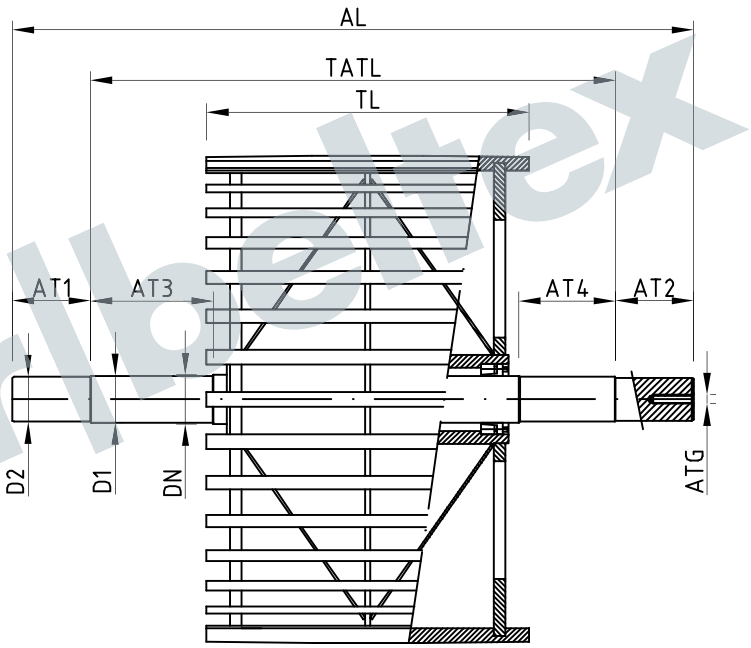
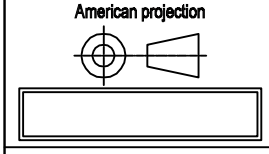
BAR PULLEY





TATL		D2			
AL		D1			
TL		DN		Shaft / Pulley connection	
SH/SA		AT4		Crowning	
SA		AT3		Product discharge cone	
RD		AT2		Coating	
ATG		AT1		Material	

American projection



Bar pulley

Remarks:

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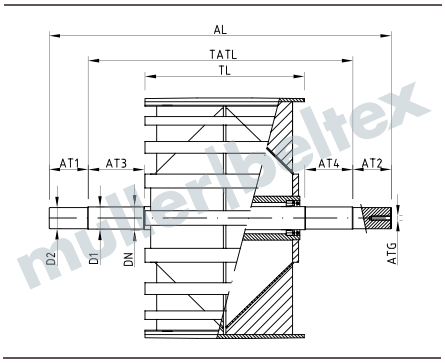
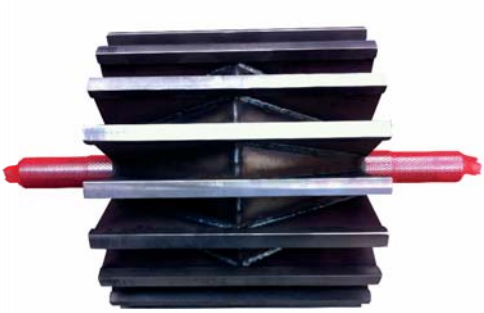


WING PULLEY

The return pulley in bucket elevators should be an open type pulley allowing product to pass through its surface. The wing pulley should preferably have an internal double cone to release trapped product sideways. In order to offer the elevator belt sufficient support the pitch between the wings should be as small as possible, but large enough to allow the conveyed product to pass through the gap. The wing style return pulley is the pulley of choice when handling coarse lumpy product and product that has the tendency to build.



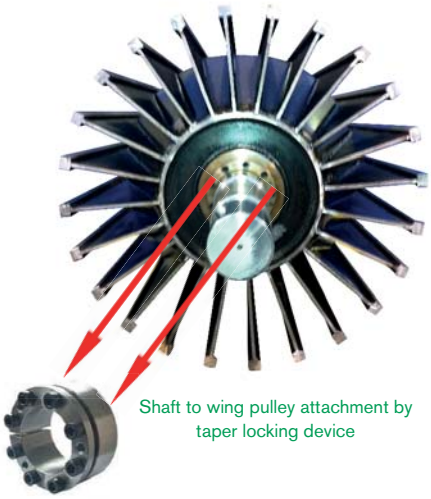
Obtaining a quotation for a wing pulley

To obtain a quotation for a wing pulley, please complete below drawing No.12.00.60 and return it to your Muller Beltex representative.

Please also mention the following 4 points:

- Material of the wing pulley and shaft
- Shaft / wing pulley connection: welded or taper locking device
- Shaft details e.g.: keyway, rejuvenations and shaft mortise
- Surface treatment e.g.: protective coating, paint.

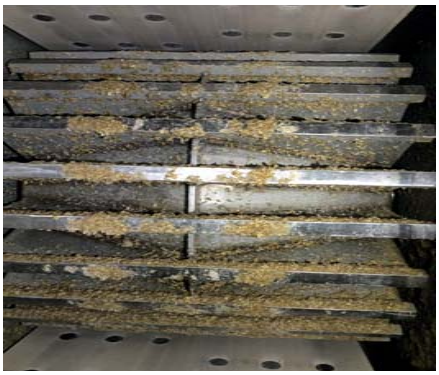
Close up of the wings that support the elevator belt



Shaft to wing pulley attachment by taper locking device

Wing pulley close up with the internal double cone showing

Shaft showing with 2 step juvenation and with keyway



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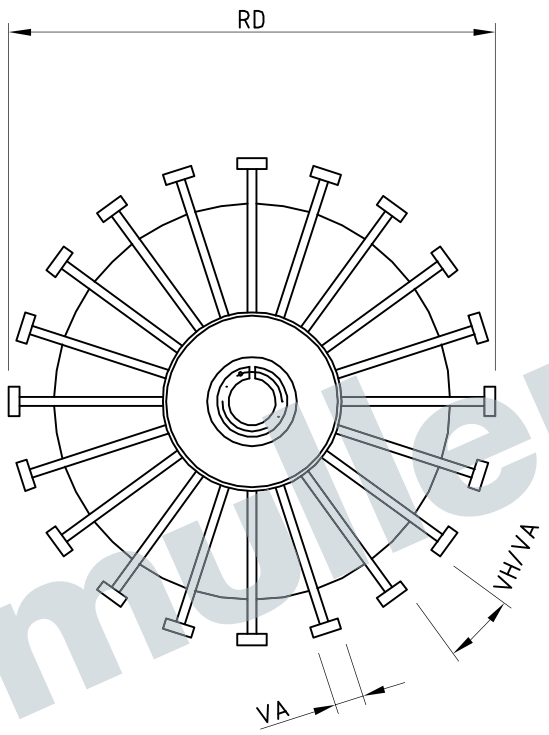
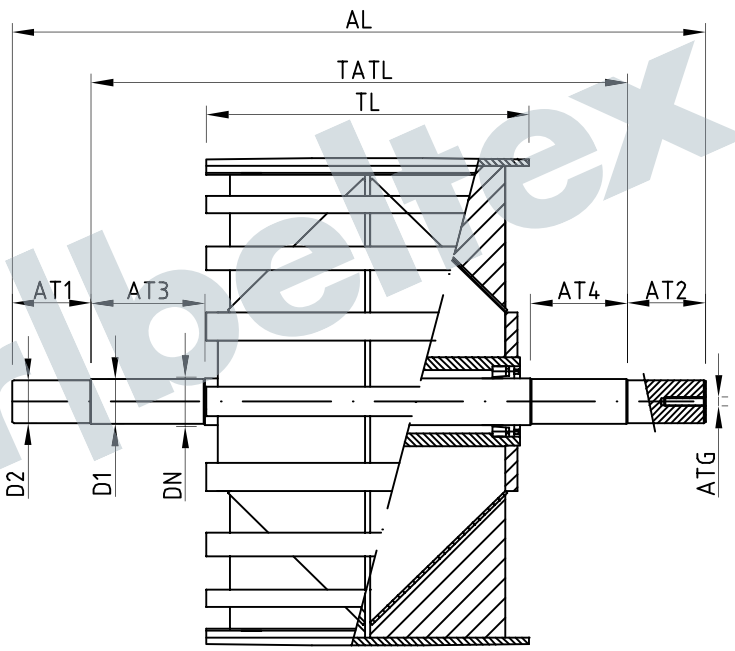
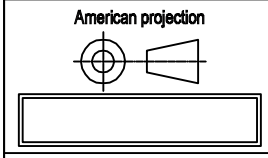
WING PULLEY





TATL		D2			
AL		D1			
TL		DN		Shaft / Pulley connection	
VH/VA		AT4		Crowning	
VA		AT3		Product discharge cone	
RD		AT2		Coating	
ATG		AT1		Material	

American projection



Wing Pulley

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