

# ROLLER / IDLER



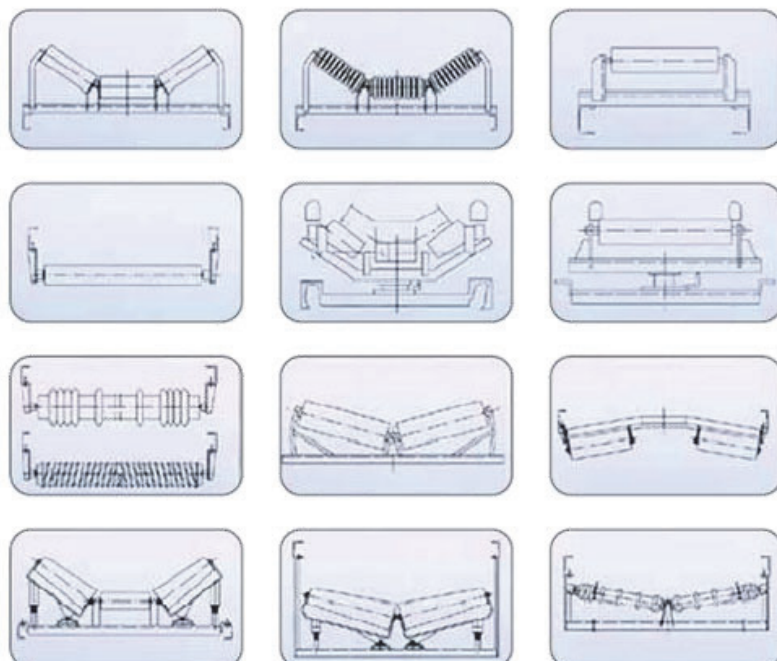
## Features

**Application:** Roller plays a very important role in a belt conveyor system. They consist in the entire transport process to support conveyor belt and move the materials loaded on conveyor belt.

**Materials:** Steel, HDPE, UHMWPE, Nylon, Rubber Coated, etc.

## Type

- ※ **Carrying Roller:** Troughing roller, Impact roller, Flat carrier roller, Self-aligning carrier roller
- ※ **Return Roller:** Flat return roller, Self-aligning return roller, Rubber disc return roller, Spiral return roller, V-return roller



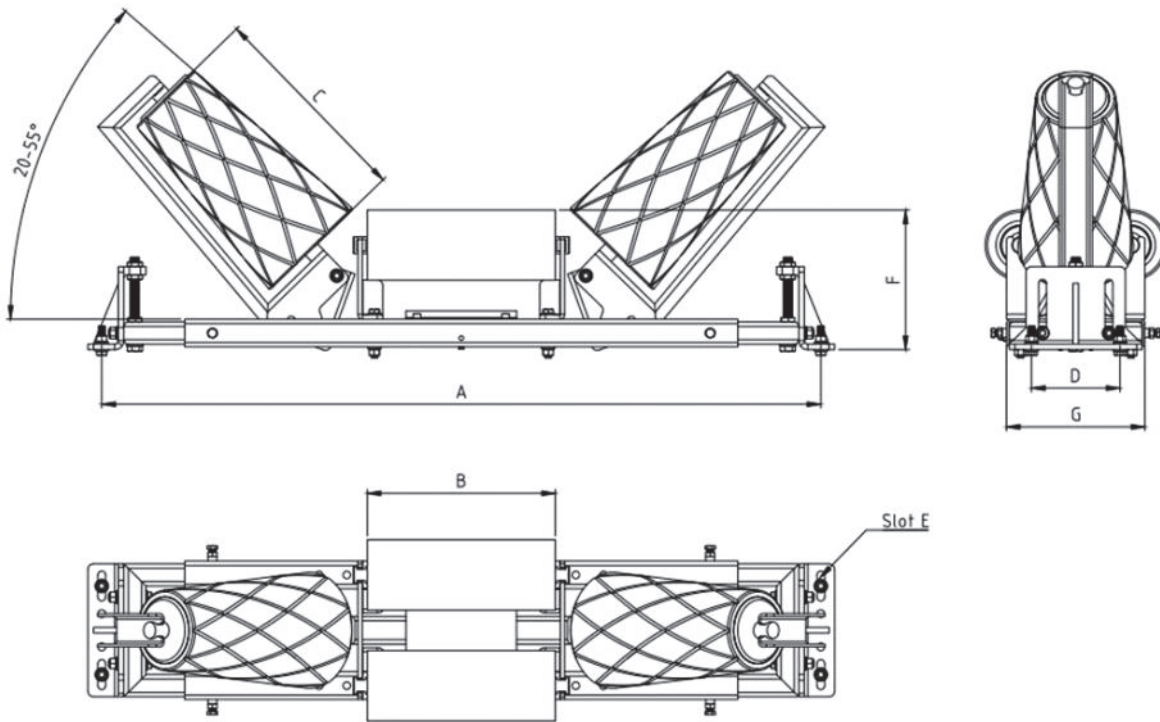
## Product Range

- ※ **Tube Diameter:** 63.5 ~ 219mm, etc.
- ※ **Shaft Diameter:** 20mm, 25mm, 30mm, 35mm, 40mm, 45mm, 50mm, etc.
- ※ **Bearing Size:** 6204, 6205, 6304, 6305, 6306, 6307, 6308, 6309, 6310, etc.
- ※ **Bearing Brand:** SKF, NSK, FAG or Chinese Top Brand

## Main Technical Data

Item	Condition			Standard
Run out	Belt Speed $\geq 3.15\text{m/s}$	Roller Length < 550mm		$\leq 0.5\text{mm}$
		Roller Length $\geq 550 \sim 950\text{mm}$		$\leq 0.7\text{mm}$
		Roller Length $\geq 950 \sim 1600\text{mm}$		$\leq 1.3\text{mm}$
		Roller Length $\geq 1600\text{mm}$		$\leq 1.7\text{mm}$
	Belt Speed < 3.15m/s	Roller Length < 550mm		$\leq 0.6\text{mm}$
		Roller Length $\geq 550 \sim 950\text{mm}$		$\leq 0.9\text{mm}$
		Roller Length $\geq 950 \sim 1600\text{mm}$		$\leq 1.5\text{mm}$
		Roller Length $\geq 1600\text{mm}$		$\leq 1.9\text{mm}$
Axial Displacement	Load 500N axial pressure for 1 min			$\leq 0.7\text{mm}$
Rotational Resistance	<b>Before Testing:</b> Rotation speed: 1450r/min, 20 min <b>Test:</b> Temperature: 20~25°C Under 250N pressure	Dustproof Roller	Shaft Diameter $\leq 108\text{mm}$	$\leq 2.50\text{N}$
			Shaft Diameter $\geq 133\text{mm}$	$\leq 3.00\text{N}$
		Waterproof Roller	Shaft Diameter $\leq 108\text{mm}$	$\leq 3.60\text{N}$
			Shaft Diameter $\geq 133\text{mm}$	$\leq 4.35\text{N}$
Rotational Resistance After 1h of cessation	<b>Re-test:</b> Temperature: 20~25°C Under 250N pressure Rotation speed: 600r/min, 10min	Dustproof Roller	Shaft Diameter $\leq 108\text{mm}$	$\leq 3.75\text{N}$
			Shaft Diameter $\geq 133\text{mm}$	$\leq 4.50\text{N}$
		Waterproof Roller	Shaft Diameter $\leq 108\text{mm}$	$\leq 5.40\text{N}$
			Shaft Diameter $\geq 133\text{mm}$	$\leq 6.53\text{N}$
Axial Displacement After Drop Test	Horizontally free-falling from the height of 1000mm			$\leq 1.5\text{mm}$
	Vertically free-falling from the height of 1800/G (G=roller mass)			No damage or cracks, no loose in parts.
Dust-Proof	Sealing box filled with 20% of coal dust (granularity: 0.635mm)	No water	Rotation speed: 600r/min, 200h	No coal dust in the bearing and grease.
		Water flow 0.45L/min	Rotation speed: 600r/min, 72h	$\leq 150\text{g}$
Water-Proof	The surface height of the sink is equal to center height of horizontal roller		Rotation speed: 600r/min, 24h	$\leq 5\text{g}$
Axial Load	Load 10000N axial pressure for 5min		Shaft Diameter $\leq 20\text{mm}$	The parts of roller are not disconnected.
	Load 15000N axial pressure for 5min		Shaft Diameter $\geq 25\text{mm}$	The parts of roller are not disconnected.

# TROUGH TRACKER HD

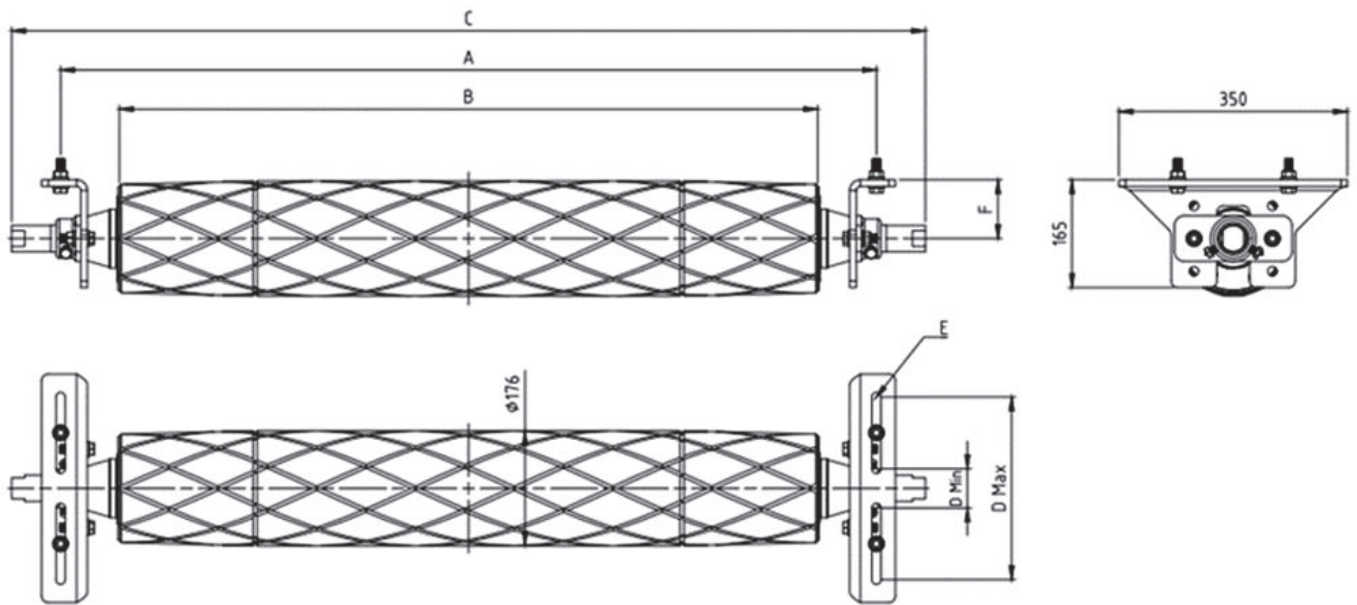


## Tech Data

Part Number	Belt	A +/-	B	C	D Min-	E (Slot)	F	G	Mass
<b>Heavy Duty</b>	<b>Bearing Centre Roller 6305/Wing Roller 6305 - 12mm Lagging</b>								
TTHD50	450/500	700	180Xφ102	200	140-240	14X50	180-250	250	65
TTHD65	600/650	850	220Xφ102	290	140-240	14X50	180-250	250	70
TTHD80	750/800	1000	270Xφ102	290	140-240	14X50	180-250	250	80
	<b>Bearing Centre Roller 21306/Wing Roller 21306 - 12mm Lagging</b>								
TTHD90	900	1150	320Xφ127	380	140-240	14X50	200-270	250	100
TTHD105	1000/1050	1250	370Xφ127	380	140-240	14X50	200-270	250	103
TTHD120	1200	1450	430Xφ152	490	140-240	18X50	200-270	250	138
TTHD140	1350/1400	1700	480Xφ152	490	140-240	18X50	200-270	250	144
TTHD150	1500	1800	540Xφ152	640	140-240	18X50	200-270	250	169
TTHD160	1600	2000	540Xφ152	640	140-240	18X50	200-270	250	172

\* All dimensions in mm

# RETURN TRACKER HD/EHD PU

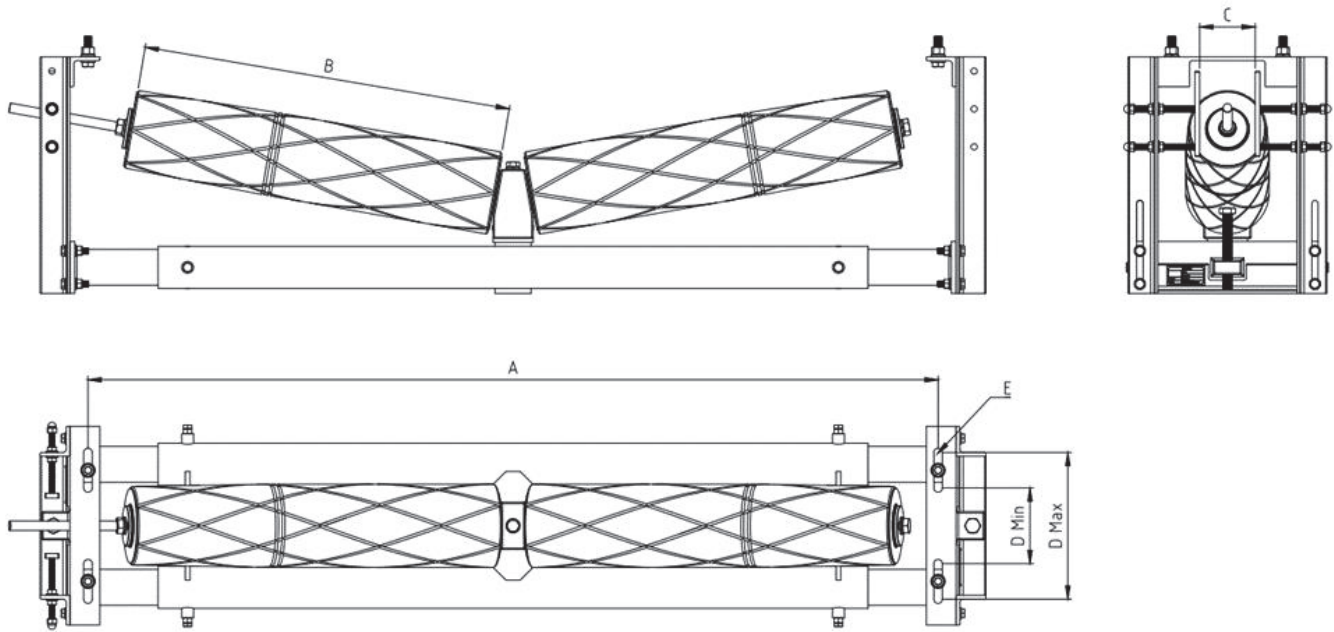


## Tech Data

Part Number	Belt	A +/-	B	C	D Min-	E (Slot)	F	Mass
<b>Heavy Duty</b>	<b>Bearing 6017-Steel Housings-φ40 Shaft-Nomφ176mm include 12mm Lagging</b>							
RTHD50	450/500	700	520	850	60-280	14X70	65-140	48
RTHD65	600/650	900	720	1050	60-280	14X70	65-140	53
RTHD80	750/800	1050	870	1200	60-280	14X70	65-140	58
RTHD90	900	1150	970	1300	60-280	14X70	65-140	63
RTHD100	1000/1050	1300	1120	1450	60-280	14X70	65-140	68
RTHD120	1200	1450	1270	1600	60-280	14X70	65-140	77
<b>Extra Heavy Duty</b>	<b>Bearing NU1017+51117-Steel Housings-φ40 Shaft-Nomφ176mm include 12mm Lagging</b>							
RTEHD140	1350/1400	1700	1470	1850	60-280	14X70	65-140	86
RTEHD150	1500	1800	1570	1950	60-280	14X70	65-140	90
RTEHD160	1600	2000	1670	2150	60-280	14X70	65-140	95

\* All dimensions in mm

# DOUBLE V RETURN TRACKER HD



## Tech Data

Part Number	Belt	A +/-	B	C	D Min-Max	E (Slot)	Mass	Roller
<b>Heavy Duty</b>	<b>Bearing 6017--Steel Housings--Nomφ176mm include 12mm Lagging</b>							
DVTHD105	1050	1300	550	88	160-310	18X75	153	24
DVTHD120	1200	1450	630	90	160-310	18X75	163	27
DVTHD140	1400	1700	730	94	160-310	18X75	175	30
DVTHD150	1500	1800	780	98	160-310	18X75	182	32
DVTHD160	1600	2000	855	102	160-310	18X75	190	34

\* All dimensions in mm