

# WS – standard version

## CONTENT

<b>1. Basic parameters</b> .....	<b>1</b>
<b>2. Basic diameters</b> .....	<b>2</b>
2.1. WS PRIME, WS ECONOMIC – machine with standard turntable .....	2
2.2. WS PRACTIC – machine with turntable with cut-out .....	3
<b>3. Basic components parameters</b> .....	<b>4</b>
3.1. Turntables .....	4
3.2. Mast .....	4
3.3. Prestretch device .....	4
<b>4. Parameters of additional accessories</b> .....	<b>5</b>
4.1. Turntable access ramp .....	5
<b>5. Additional information</b> .....	<b>5</b>
5.1. Environment .....	5
5.2. Connection to supply system .....	6
5.3. Expendable material .....	6
5.4. Manufacturers .....	6
5.5. Standard colours .....	6
5.6. Documentation .....	7
5.7. Weight .....	7
5.8. Transport dimensions .....	8

<b>Standard version</b>	– bold face
option	– thin face, grey background

## 1. Basic parameters

			WS PRIME	WS ECONOMIC	WS PRACTIC
control			<b>manual</b>	<b>programmable system</b>	
	count of programs		-	2	
turntable	basic		<b>15</b>	<b>15, 16.5, 18</b>	-
	with cut-out		-	-	<b>15, 16.5, 18</b>
	maximum load	kg	<b>2000</b>	<b>2000</b>	<b>1000</b>
	control *)		<b>no (contactor), frequency converter</b>		
	oriented stop **)		<b>yes, precise</b>		
	turntable access ramp		optional		<b>no</b>
	pit frame		optional		<b>no</b>
Mast	height	mm	<b>2000</b>		
	height of goods check ***)		<b>no</b>	<b>optical sensor</b>	
prestretch device			<b>hand brake, mechanic, electromagnetic brake</b>	<b>hand brake, mechanic, electromagnetic brake, single-motor LIGHT</b>	

\*) control of turntable speed

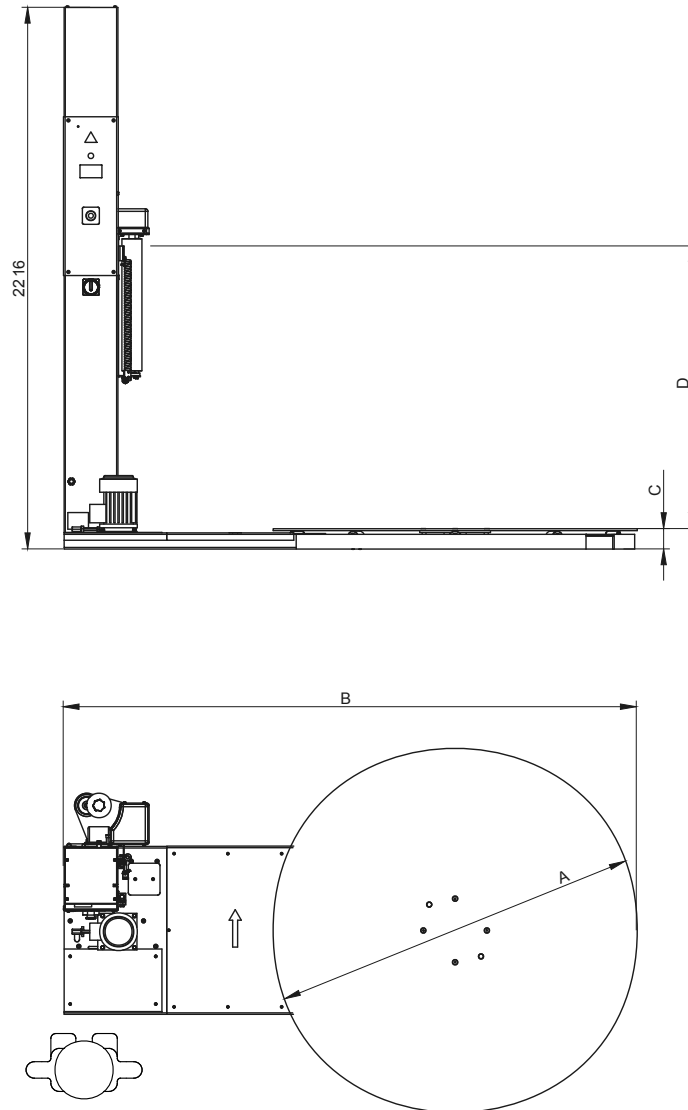
\*\*) oriented stop – turntable stopping accuracy in the same position; see chap. 3.1.1

\*\*\*) goods height check during the wrapping; the pallet is wrapped all over the height

## 2. Basic diameters

### 2.1. WS PRIME, WS ECONOMIC – machine with standard turntable

Figure contour – working place



		WS 15	WS 16.	WS 18	WS 15 with scale	WS 16.5 with scale
<b>PRIME, ECONOMIC</b>						
pallet diagonal max.	mm	<b>1490 (size 1200×800)</b>	1650 (size 1200×1000)	1800	1490 (size 1200×800)	1650 (size 1200×1000)
load capacity	kg	<b>2000</b>	2000	2000	2000	2000
A – diameter	mm	<b>1490</b>	1650	1800	1490	1650
B – length	mm	<b>2350</b>	2505	2655	2350	2505
C – turntable plane height		<b>77</b>	77	79	91 – 96 **)	91 – 96 **)
D – min. wrap height *)		<b>510</b>				
D – max. wrap height *)		<b>2250</b>				
turntable speed	1/min	<b>10</b>				
accuracy of turntable stop	°	see chap. 3.1.1				
motor	W	<b>370</b>	370	370	370	370
weight	kg	<b>max. 370</b>	max. 390	max. 485	max. 420	max. 465

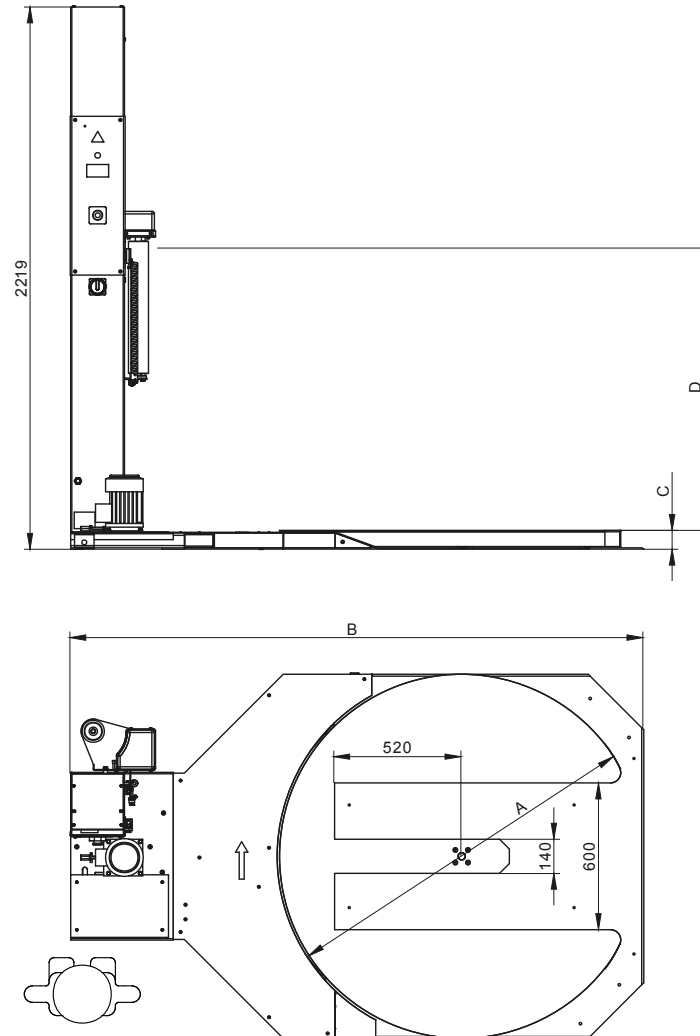
Marking of **standard** and **optional** equipment

\*) Wrap height – max. height between turntable and upper edge of foil on reel in prestretch device

\*\*\*) According to the height adjustment of tensiometers

## 2.2. WS PRACTIC – machine with turntable with cut-out

Figure contour – working place



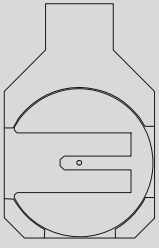
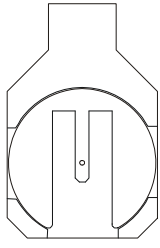
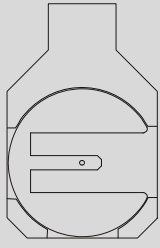
		WS 15 PRACTIC	WS 16.5 PRACTIC	WS 18 PRACTIC
pallet diagonal max.	mm	<b>1490 (size 1200×800)</b>	1650 (size 1200×1000)	1800
load capacity	kg	<b>1000</b>	1000	1000
A – diameter	mm	<b>1490</b>	1650	1800
B – length	mm	<b>2350</b>	2510	2655
C – turntable plane height		<b>78</b>	78	78
D – min. wrap height *)		<b>510</b>		
D – max. wrap height *)		<b>2250</b>		
turntable speed	1/min	<b>10</b>		
accuracy of turntable stop	°	see chap. 3.1.1		
motor	W	<b>370</b>	370	370
weight	kg	<b>max. 405</b>	max. 450	max. 500

\*) Wrap height – max. height between turntable and upper edge of foil on reel in prestretch device

Marking of **standard** and **optional** equipment

### 2.2.1. Orientation of cut-out

For turntable with cut-out only. Orientation of cut-out for loading of goods on turntable with low-lift trolley

Model	WS PRACTIC		
orientation of cut-out			
	left	front	right

## 3. Basic components parameters

### 3.1. Turntables

see chap. 2

#### 3.1.1. Overpass of turntable (oriented stop)

oriented stop (design of turntable)	mode	
	full range	continual conditions
<b>standard (without converter)</b>	<b>±60°</b>	<b>±10°</b>
precise (with converter)	±8°	±1°

**full range:** overpass is defined for range of load 0+1500 kg, for range of secondary pre-stretch : 70+120% and for maximal speed of turntable.

**continual conditions:** exactness of repeated stop for same secondary pre-stretch load (difference max. 100 kg) and speed of turntable.

### 3.2. Mast

	mm	WS
height	mm	<b>2150</b>
width	mm	<b>220</b>
depth	mm	<b>260</b>
film carriage drive	W	<b>250</b>
Height of wrapping start *)	mm	<b>0, 75, 150</b>

\*) Enables setting of distance between turntable surface and lower edge of foil (at zero prestretching).

### 3.3. Prestretch device

WS		hand brake	mechanic prestretch	electromagnetic brake	Single-motor LIGHT
height	mm	<b>555 (without handle)</b>	685	688	754
width	mm	<b>158 (without sensor)</b>	335 (without sensor)	305 (without sensor)	386
depth	mm	<b>267 (without sensor)</b>	280 (without sensor)	210 (without sensor)	284
regulation of pre-stretch		<b>manual</b>	ne	electromagnetic brake	electric motor+gear
primary pre-stretch standard	%	-	130	-	180
primary pre-stretch optional	%	-	80, 130, 180	no	80, 130, 180
secondary pre-stretch	%	-	-	0 up to 100% (of braking force)	70 up to 400

Marking of  **standard** and  **optional** equipment

WS		<b>hand brake</b>	mechanic prestretch	electromagnetic brake	Single-motor LIGHT
power consumption of el. mg. brake	W	-	-	18	-
el. motor (3x400V 50Hz)	W				370

## 4. Parameters of additional accessories

### 4.1. Turntable access ramp

No for turntable with cut-out

Version of turntable access ramp		<b>standard</b>	extended 1700	for turntable with scale		
for turntable		<b>15, 16.5, 18</b>	15, 16.5, 18	15 with scale, 16.5 with scale		
width	mm	<b>1000</b>	1000	1000		
length (total)	mm	<b>1247</b>	1677	1778		
long of sloping part	mm	<b>1027</b>	1457	1558		
height	mm	<b>76</b>	76	93		
slope	°	<b>4</b>	2,8	3.25		
weight	kg	<b>max. 70</b>	max. 95	max. 105		

### 4.2. Foil constriction roller

for turntables		<b>15, 16.5, 18 standard 15, 16.5, 18 with cut-out</b>
Height of wrapping start *)	mm	<b>76 to 140 mm</b>
Setting of height		<b>continuous</b>

\*) Enables setting of distance between turntable surface and lower edge of foil (at zero prestretching).

## 5. Additional information

### 5.1. Environment

environment	according HD60364-5-51:2009	<b>normal, AA5+AB5</b>
	according EN 60721-3-3	<b>3K3/3B1/3C1/3S1/3M1</b>
	workplace	<b>indoor, covered</b>
	temperature	<b>+5°C to +40°C</b>
	rate of temperature change	<b>max. 0.5°C/min.</b>
	relative humidity	<b>30% to 85% without condensation</b>
	attitude	<b>up to 2000 m</b>
	dust	<b>max. 2mg/m<sup>3</sup>, granular size max. 10 µm</b>
	explosive environment	<b>no (prohibited)</b>
	emission of noise	<b>63.9 dB</b>
	floor	<b>horizontal, concrete, flatness max. ±3 mm/2m</b>
	area around machine	<b>EN 547-1, EN 547-2, EN 547-3</b>
	interference elimination	<b>group. 1 class B according to EN 55011</b>
	interference resistance	<b>EN 61000-4-2 EN 61000-4-3 EN 61000-4-4 EN 61000-4-6</b>
operating staff	age	<b>18 and more</b>
	burden	<b>17 kg (reel with film during loading)</b>
	acquaint with user manual	<b>obligatory</b>

Marking of **standard** and **optional** equipment

revision	initial revision from manufacturer	<b>EN 60204-1</b>
	revision before operating	<b>IEC 60364-4-41, IEC 60364-6</b>
CE certification		<b>yes</b>
service life		<b>50 000 hours</b>

## 5.2. Connection to supply system

			WS PRIME	WS ECONOMIC, WS PRACTIC
el. installation	power supply		TNC-S 3+PE+N 3×400/230V, 50Hz, EN 50160 *)	
			TNC-S 1+PE+N 230V, 50Hz, EN 50160 *)	
	power requirement	kVA	0.73 *)	1.5 *)
	protection	A	16	
	voltage of control circuit	V	24=	
IP code	motors		IP55	
	switchboards		IP54	
	sensors		IP65	

\*) see type plate (depends on configuration and wiring)

## 5.3. Expendable material

foil wrapper	material		PE stretch foil
	roll diameter	mm	max. 250
	foil width	mm	500
	tube diameter	mm	74 up to 86
	weight of full roll	kg	approx. 17
	foil thickness	µm	20 to 40

## 5.4. Manufacturers

			WS PRIME	WS ECONOMIC, WS PRACTIC
PLC			---	Schneider
cells and sensors	optical		Telemecanique	
	inductive		Telemecanique	
contactors			Telemecanique	
circuit breakers			Merlin Gerin	
auxiliary relays			Telemecanique	
distribution frames			WAGO	
controllers			Telemecanique	
motors:	turntable		Bonfiglioli, Siemens, Lenze	
	foil carriage		Bonfiglioli	
	elmag. brake		Lenze	

## 5.5. Standard colours

mast	RAL 5013	dark blue	possible to change according to customers wish
turntable frame	RAL 9006	silver grey	not possible to change
moving parts	RAL 3020	red	not possible to change
safety parts	RAL 1018	yellow	not possible to change
others	RAL 9005	black	possible to change according to customers wish
	-	galvanized parts without colouring	not possible to change

Marking of  **standard** and  **optional** equipment

## 5.6. Documentation

Standard language of accompanying documentation

Customer`s country	CZ, SK	DE, A	PL	RU, post soviet states	other
count of impression *)	1	1	1	1	1
User`s guide	CZ	DE	PL	RU	GB
Wiring diagram	CZ	DE	GB	GB	GB
Manuals of components (sensors, converters)	CZ (GB) **)	DE (GB) **)	DE (GB) **)	DE (GB) **)	DE (GB) **)
Spare parts catalogue	for demand CZ	for demand DE	for demand PL	for demand RU	for demand GB
CE certification	CZ	DE	GB	GB	GB
Certificate of warranty	CZ	DE	GB	GB	GB
Overtake protocol	CZ	DE	GB	GB	GB
Documentation on CD ROM	on demand (languages consistent with standard documentation)				

Another languages: must be specified

\*) Count of impression for one machine.

\*\*\*) Delivered documentation (original or copy) delivered by producer of component

## 5.7. Weight

All weights are rounded to 5 kg.

turntable		15	16.5	18
standard	belt and chain transmission	260 kg	290 kg	375 kg
with cut-out		295 kg	340 kg	390 kg

mast WS	80 kg			
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prestretching device WS	hand brake	mechanic	el.mg. brake	single-motor LIGHT
	10 kg	30 kg	20 kg	45 kg

### 5.7.1. Weights of additional parts

access ramp	for turntable	15 standard	15 with cut-out	16.5 standard	18 standard
	basic	70 kg	impossible	70 kg	70 kg
	prolonged	95 kg	impossible	95 kg	95 kg
	with scale	105 kg	impossible	105 kg	-

pit frame	for turntable	15 standard	15 with cut-out	16.5 standard	18 standard
	WS	35 kg	-	-	40 kg
universal	WMS and WS	65 kg	-	-	-

holder of top sheet application	Width of the film	1200	1400
		30 kg	30 kg

Marking of **standard** and **optional** equipment

### **5.8. Transport dimensions**

		length	width	height
<b>turntable</b>	15 standard	<b>2360</b>	<b>1500</b>	<b>410</b>
	15 with cut-out	<b>2360</b>	<b>1490</b>	<b>410</b>
	16.5 standard	2500	1650	410
	16.5 with cut-out	2515	1650	410
	18 standard	2650	1800	410
	18 with cut-out	2690	1800	410