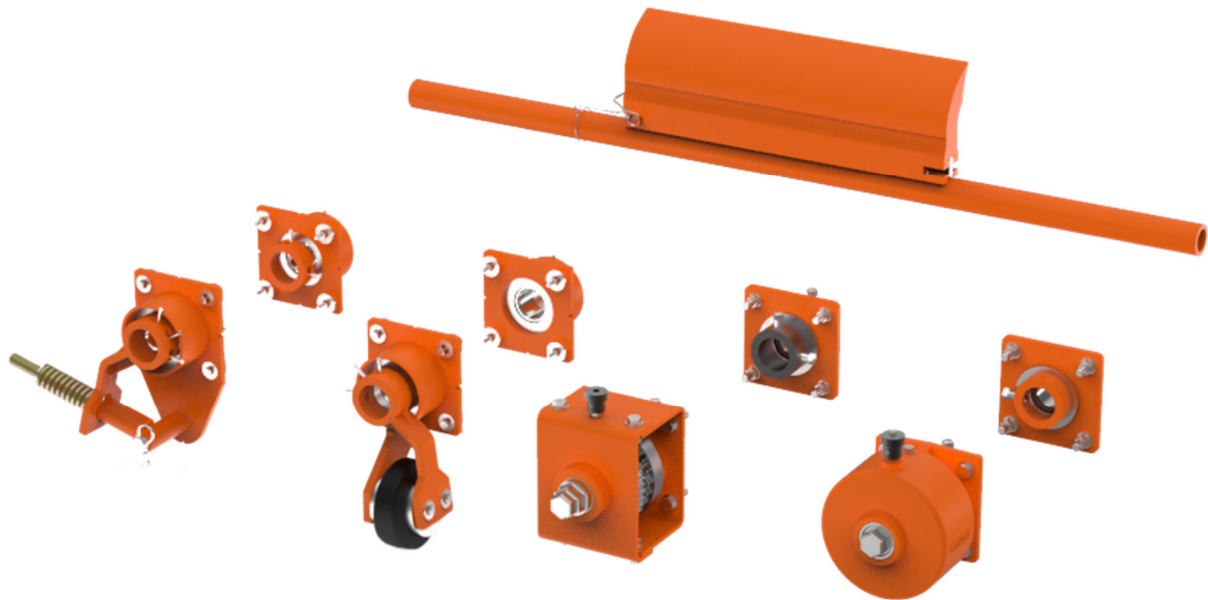




## QC1™ HD Pre-Cleaner



## Operating Instructions Part 2

Version: 0  
Language: ENG  
M3618EUK-10/20

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# 1 General

---



## NOTE

Before starting work on the cleaner or the conveyor, part 1 and 2 of these operating instructions must be read and understood completely

## 1.1 About these operating instructions

These operating instructions apply solely for cleaners and are intended for those persons who install cleaners, commission them, and monitor their usage.

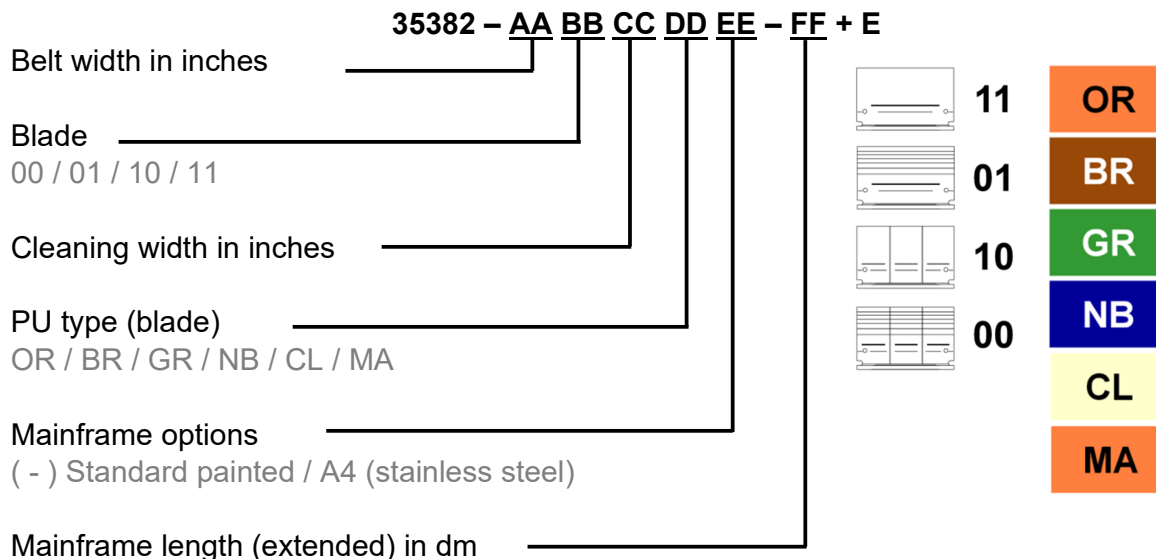
The operating instructions must be kept for the lifetime of the cleaners and must be made available in an orderly condition to all persons entrusted with work with and on the cleaners.

## 1.2 Accompanying Documents

Part 1 of the operating instructions, which is provided separately, is an integral part of these operating instructions.

### 1.3 Part number

#### Cleaner



#### Tensioner

- Twist tensioner (square) 31443-...+E
- Twist tensioner (round) 38850-...
- Air tensioner: 32745-...+E
- Spring tensioner: 38180-...

### 1.4 Technical Data

The cleaner is suitable for the following operating parameters:

	Operating parameter
Belt widths:	500 – 2.400 mm
Pulley diameter:	300 - 600 mm
Belt speed:	Max. 4,6 m/s
Temperature range:	-40 - 150 °C depending on PU type
Reversing operation:	Possible but has no cleaning effect

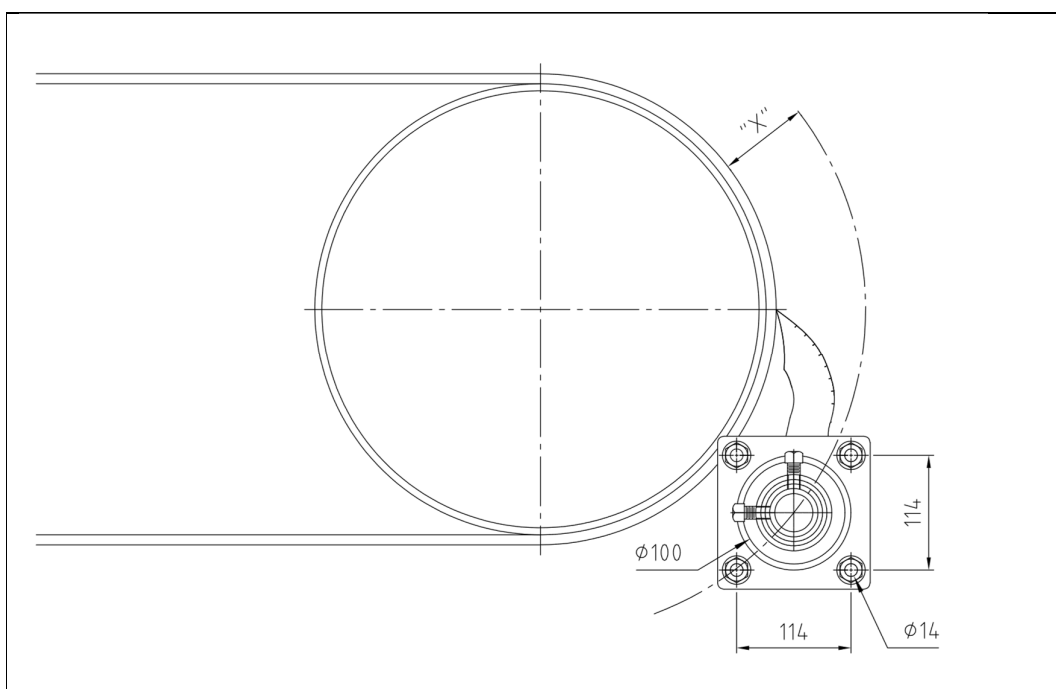
## 2 Installation



### NOTE

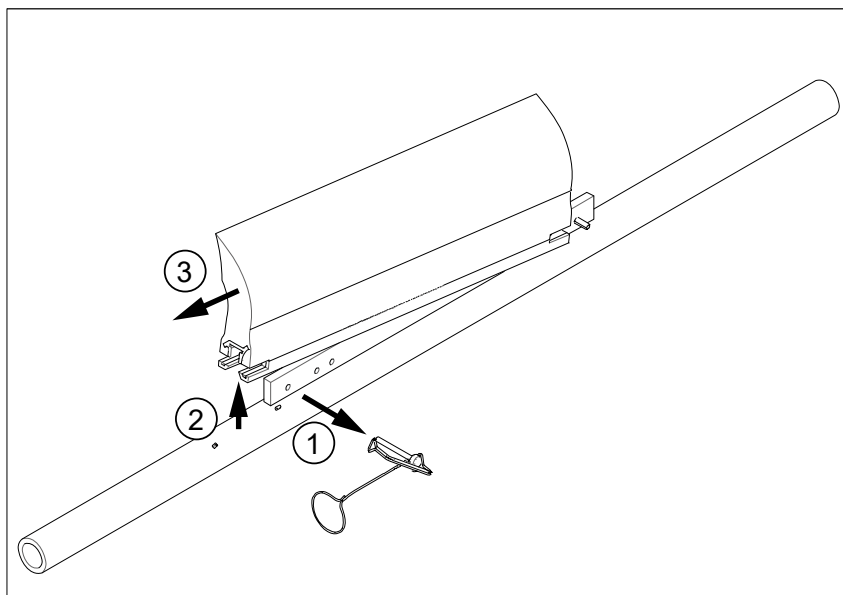
For a general description of cleaner installation, refer to part 1 of these operating instructions.

### 2.1 Determining the installation position

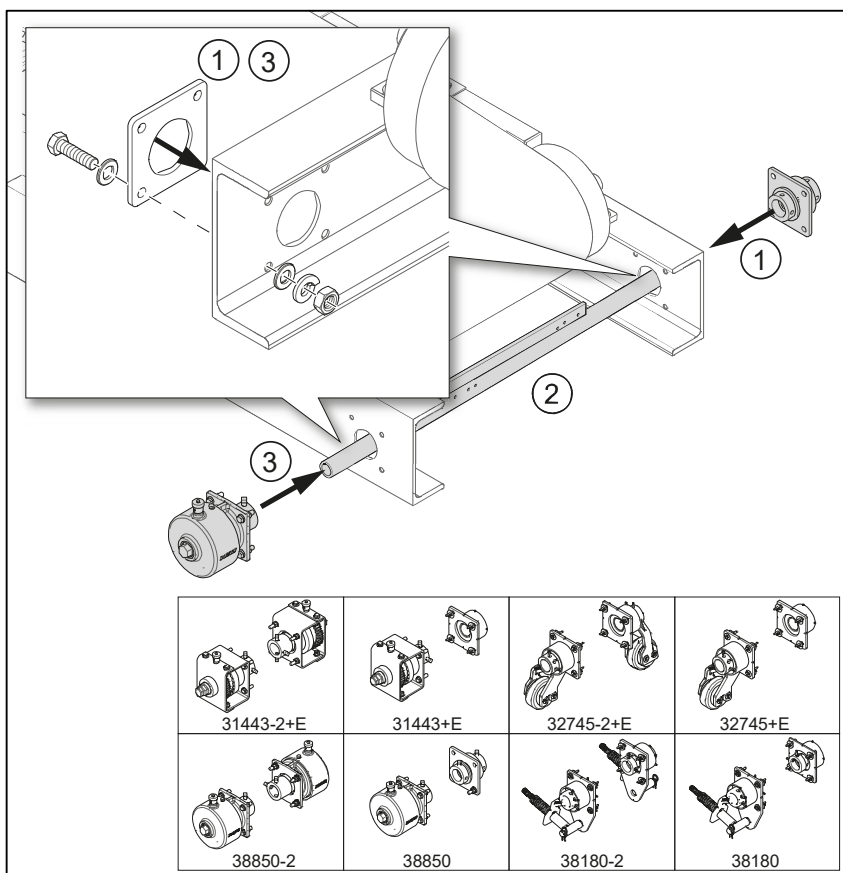


Pulley diameter* in mm	Length x in mm
300-375	114
376-475	102
476 >	89
*(Including pulley lining and conveyor belt)	

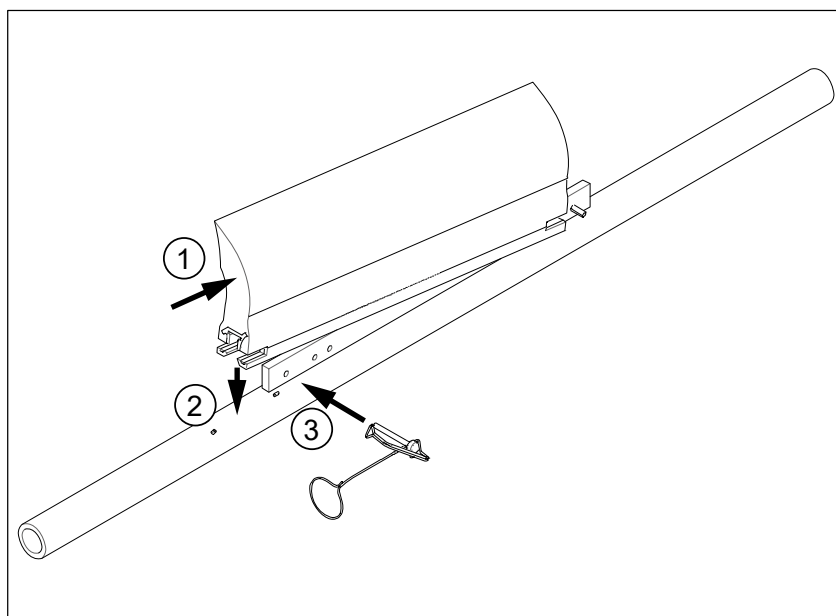
## 2.2 Preparing the cleaner



## 2.3 Installing the tensioner



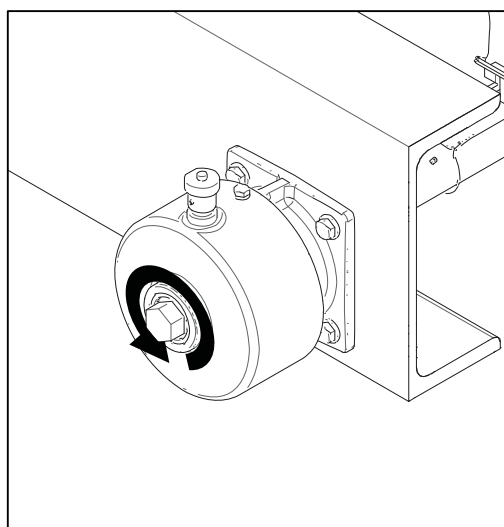
## 2.4 Installing the cleaner



## 2.5 Tension values of twist tensioners 31443-... and 38850-...

Belt width		Number of notches (clicks)
in	mm	
18	500	2
24	650	3
30	800	3
36	1000	4
42	1200	5
48	1400	6
54	1600	3*
60	1800	4*
72	2000	5*
84	2200	5*
96	2400	6*

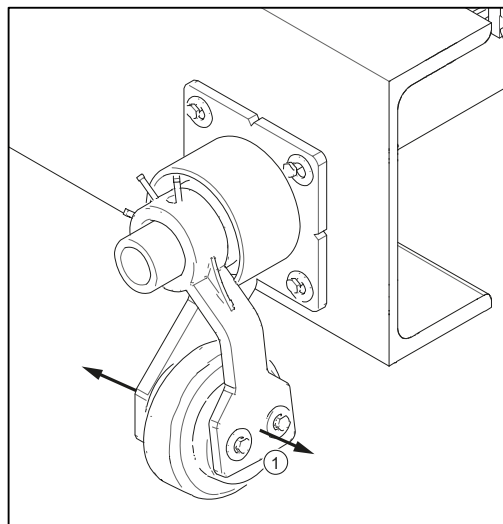
\*Per tensioner;  
Dual tensioners are needed



## 2.6 Tension values of air tensioner 32745-...

Belt width		Compressed air pressure in bar
in	mm	
18	500	0,4
24	650	0,6
30	800	0,8
36	1000	1,0
42	1200	1,2
48	1400	1,4
54	1600	0,8*
60	1800	0,9*
72	2000	1,1*
84	2200	1,2*
96	2400	1,4*

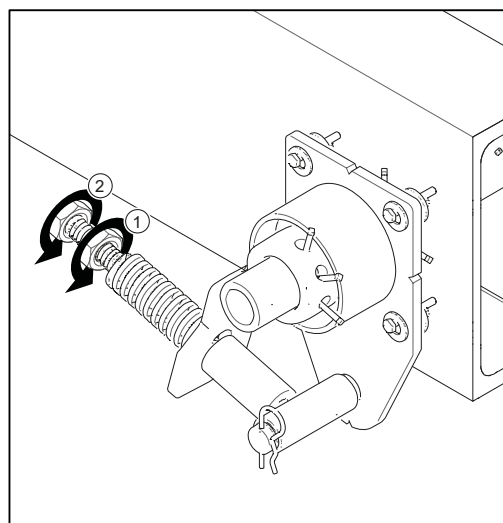
\*Per tensioner;  
Dual tensioners are needed



## 2.7 Tension values of spring tensioner 38180-...

Belt width		Compression spring length in mm
in	mm	
18	500	92
24	650	90
30	800	86
36	1000	83
42	1200	79
48	1400	76
54	1600	86*
60	1800	86*
72	2000	83*
84	2200	79*
96	2400	76*

\*Per tensioner;  
Dual tensioners are needed





## 2.8 Placing labels

### 2.8.1 Safety label

The safety label below must be attached to the conveyor system in the immediate vicinity of the cleaner:



### 2.8.2 Other labels

The labels below are attached to the product:

1. Sticker showing the address of the Martin Engineering branch and the designation of the product
2. A sticker containing the tension values for the respective tensioner

# 3 Scope of delivery and spare parts

## 3.1 Primary cleaner

Item Pos.	Qty./Anz.	Description / Beschreibung	PN / Teile-Nr.
1	1	Heavy Duty GC™ #1 mainframe / Hauptplatte	s.c. / s.T.
2	1	Heavy Duty GC™ #1 blade / Abstreifblech	s.c. / s.T.
3	1	Wire lockpin 1/4" x 2-1/2" / Sicherungsbolzen	32772
4	1	Spring pin 8 x 50 mm / Hochspannast	32774-E
5	1	Cable Ø1mm / Kabel / Kabel	40181
6	2	Cable clip for 1mm wire / Seilklammer	40182

Part number / Teilenummer	Blade color / Blattfarbe	Range of application / Anwendungsbereich
35382-XXXXXXXR-XX-E	Orange	Used for 80% of all applications / Geeignet für 80% aller Anwendungen
35382-XXXXXXXB-XX-E	Brown / Braun	Used for 10% of all applications / Geeignet für 10% aller Anwendungen
35382-XXXXXXCL-XX-E	Clear / Klar	Used for applications / Anwendung mit Chemikalien
35382-XXXXXXGR-XX-E	Green / Grün	Used for temperatures above 120°C / Anwendung bei Temperaturen über 120°C
35382-XXXXXXNB-XX-E	Navy blue / Marineblau	Used for sticky materials / Anwendung bei klebrigen Produkten
35382-XXXXXXMA-XX-E	Orange	For standard applications / für Standardanwendungen

Assemblies with blade urethane option OK only in the blade designs 11-solid or 10-solid are recommended available. Baugruppen mit dem Blatt-Urethanoption OK sind nur in der Blattausführung 11-solid und 10-solid-segmentiert verfügbar.

ML = Mainframe Length / Hauptplattlänge  
 CW = Cleaning Width / Reinigungsbreite

Shown / Dargestellt: 35382-100XXXXXX-E 35382-48XXXXXX-E  
 ML = 2000mm

Shown / Dargestellt: 35382-5AXXXXXX-E 35382-96XXXXXX-E  
 ML = 2000mm

Shown / Dargestellt: 35382-100XXXXXX-E 35382-48XXXXXX-E  
 ML = 2000mm

RL = Reinforcement Length / Verstärkungslänge

Part number / Teilenummer	BW	ML	EW	SL	RL	PN / Teile-Nr. Teilentf. 2
35382-18XX12XX-XX-E	18	1200	1000	305	-	35381-18XX12XX
35382-18XX16XX-XX-E	18	1600	1000	408	-	35381-18XX16XX
35382-18XX20XX-XX-E	18	2000	1000	457	-	35381-18XX20XX
35382-24XX18XX-XX-E	24	1800	1500	457	-	35381-24XX18XX
35382-24XX22XX-XX-E	24	2200	1500	559	-	35381-24XX22XX
35382-30XX20XX-XX-E	30	2000	2000	610	-	35381-30XX20XX
35382-30XX24XX-XX-E	30	2400	2000	711	-	35381-30XX24XX
35382-36XX20XX-XX-E	36	2000	2400	762	-	35381-36XX20XX
35382-36XX24XX-XX-E	36	2400	2400	864	-	35381-36XX24XX
35382-42XX20XX-XX-E	42	2000	2500	814	-	35381-42XX20XX
35382-42XX24XX-XX-E	42	2400	2500	916	-	35381-42XX24XX
35382-48XX20XX-XX-E	48	2000	2700	1067	-	35381-48XX20XX
35382-48XX24XX-XX-E	48	2400	2700	1168	-	35381-48XX24XX
35382-54XX20XX-XX-E	54	2000	2800	1219	1321	35381-54XX20XX
35382-54XX24XX-XX-E	54	2400	2800	1321	1521	35381-54XX24XX
35382-60XX20XX-XX-E	60	2000	3000	1372	1473	35381-60XX20XX
35382-60XX24XX-XX-E	60	2400	3000	1473	1673	35381-60XX24XX
35382-66XX20XX-XX-E	66	2000	3100	1524	1626	35381-66XX20XX
35382-66XX24XX-XX-E	66	2400	3100	1626	1726	35381-66XX24XX
35382-72XX20XX-XX-E	72	2000	3300	1676	1778	35381-72XX20XX
35382-72XX24XX-XX-E	72	2400	3300	1778	1878	35381-72XX24XX
35382-78XX20XX-XX-E	78	2000	3500	1829	1930	35381-78XX20XX
35382-78XX24XX-XX-E	78	2400	3500	1930	2130	35381-78XX24XX
35382-84XX20XX-XX-E	84	2000	3600	1881	2083	35381-84XX20XX
35382-84XX24XX-XX-E	84	2400	3600	2083	2283	35381-84XX24XX
35382-96XX20XX-XX-E	96	2000	3800	2030	2388	35381-96XX20XX
35382-96XX24XX-XX-E	96	2400	3800	2388	2588	35381-96XX24XX

\* For extended mainframe add the length in dm at the end of the part number in 100mm increments (Example: 35382-18-13) \*  
 \* Für verlängerte Hauptplatte die Länge in dm an die Teilenummer anhängen in 100mm Schritten (Beispiel: 35382-18-13)

35382-Subcode/FC	Part number / Teilenummer
b	Erdebuschleife im Zoll
c	Blatt mit Loch
d	Blade design
00:	slotted and segmented
01:	slotted
10:	segmented
e	Cleaning width in inch
f	Urethane options
OR:	Orange
BR:	Brown (chemical resistant)
GR:	Green (temperature resistant)
NR:	Navy blue (sticky material)
MB:	Orange Maximizer
g	Mainframe options
00:	Standard (ML 2000)
AR:	Extended mainframe in dm

Item	Description	Date
H	Added blade EU version	07.06.17
G	Removed blade color GR and YL	14.09.15
F	Added 3D view, unworked tables	17.11.14
Nr	Name	
No.	By	

Benennung (Description) / Änderung (Revision)  
 35382-XXXXXXX-XX-E

Martin Engineering GmbH  
 in der Reichbach 14  
 65396 Walluf, Germany

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Drawn: sba  
 Date: 08.05.2014  
 Eng: mba  
 Date: 23.02.2011  
 Appr.:  
 Date:  
 Part date: 07.06.2017  
 Page: 1/1  
 Mk./Sc: 1.15

### 3.2 Tensioner

Item / Pos.	Qty. / Anz.		Description / Beschreibung	P/N / Teile-Nr.
	Single	Dual		
1	2	-	Adjustment ring dia 76 x 25 mm / Stellung	16845
2	1	2	Sleeve / Spannelement	31388
3	1	2	Ratchet adjusting knob / Ratschen Einstellknopf	33570-TT
4	1	2	Tensioner plunger / Schaltstift	33572
5	1	2	Compressions spring 1" / Druckfeder	33573
6	1	2	Spring pin 1/8" x 1" / Hohlspannstift	33574
7	1	2	Self revealing coupling / Selbstauslösende Kupplung	33671
8	1	2	Tensioning drive / Spanngeltriebe	33672
9	1	2	Coupling / Kupplung	33673
10	1	2	Nylon bushing dia 44 mm - ID / Nylonbuchse	33674
11	1	2	Nylon bushing / Nylonhülse	33675
12	1	2	Shock ring / Dämpfungerring	33681
13	1	2	Coupling housing / Kupplungengehäuse	38711
14	1	2	Spring housing / Spanngeltriebe	38712
15	2	4	Compression washer 5/16" / Federscheibe	11462
16	2	4	Screw HHC 5/16 x 3/4 / Sechskantkopfschraube	12250
17	6	4	Square head screw 1/2 x 1 / Vierkant schraube	22763-03
18	8	8	HHC screw M12 x 45 - DIN 933, (1.0032) galv. / Sechskantkopfschraube	41081-120456ZP98
19	8	8	Hex nut M12 - DIN 934, (1.0032) galv. / Sechskantmutter	41086-12E2P
20	16	16	Washer flat M12 - DIN 125 A, (1.0032) galv. / Unterlegscheibe	41088-12AZP
21	8	8	Washer spring M12 - DIN 127, (1.0032) galv. / Federring	41090-12AZP
22	1	-	Flange / Gegenflansch	32496
23	1	-	Shock ring / Gummidämpfer	32501
24	1	-	Nylon bushing / Nylonbuchse	33335
25	1	-	Washer flat / Unterlegscheibe	34802

For side components (via width tensioner) / Für Bauteile der seitlichen Seite (entfällt bei Dualspannvorrichtung)

Flat side on knob indicates plunger orientation / Fläche Seite des Knopfes zeigt die Ausrichtung der Antriebsnagel an

38850 bis Baubreite 1400mm Belwidth up to 1400mm

Single

Dual

38850,2 ab Baubreite 1600mm Belwidth from 1600mm

Operators side components / Bauteile der Bedienersseite

Notes: Dimensions are given in mm  
 Bemessungen sind in mm  
 1) Alle Maße sind in mm  
 2) Gewicht: Single: 9,8 Kg  
 Dual: 13,6 Kg

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Date: 09/2014  
 Date: 09/2014  
 Date: 17/2014

Martin Engineering GmbH  
 in der Rehbach 14  
 65376 Walluf, Germany

Title: Twist™ Spannvorrichtung  
 Twist™ tensioner

Scale: 1:10

Revision	
No.	Description

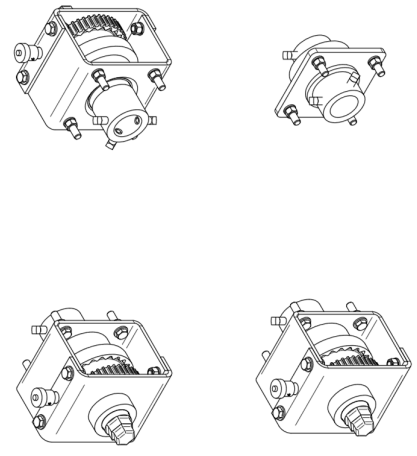
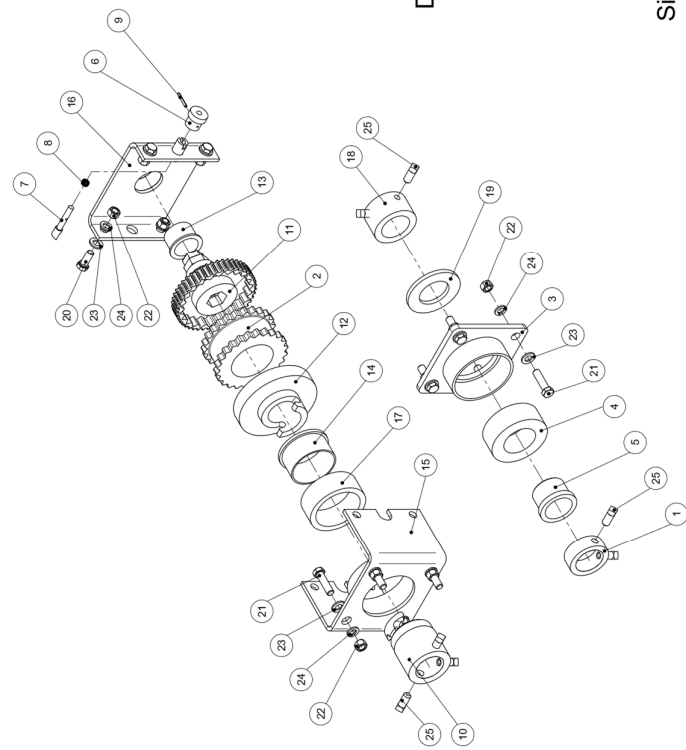
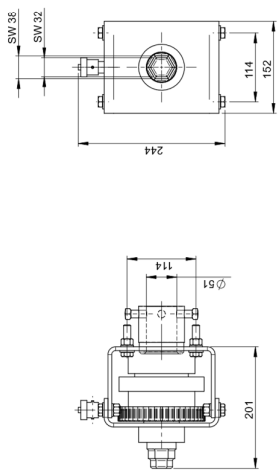
  

a	Type	Ausführung
1	Single	Single
2	Dual	Dual

b	Additional options	Zusätzliche Optionen
A:	with weldable adapter plate	mit Schweißhalterung
L:	with L-Bracket	mit L-Halterung

Item / Pos.	Qty / Anz.		Description / Beschreibung	PIN / Teile-Nr.
	Single	Dual		
1	1	-	Locking collar / Sicherungsring	18645-E
2	1	2	Sleeve / Spinnelmeint	31388
3	1	-	Fairside flange / Gegenflansch	32496
4	1	-	Shock ring / Gummidämpfer	32501
5	1	-	Nylon bushing / Nylonbuchse	33335
6	1	2	Rated adjusting knob / Ratschen Einstellknopf	33570-TT
7	1	2	Tensorer plunger / Schallsift	33572
8	1	2	Compression spring / Druckfeder	33573
9	1	2	Spring pin 1/8" x 1" / Holspannsift	33574
10	1	2	Self-revelling coupling / Selbstauslösende Kupplung	33671
11	1	2	Gear casing / Spanndel	33672+H-E
12	1	2	Locking gear / Kupplung	33673+H-E
13	1	2	Nylon bushing 1-3/4" / Nylonbuchse	33674-I
14	1	2	Nylon bushing / Nylonbuchse	33675
15	1	2	Base support / Basisaufnahme	33676
16	1	2	Tensoringsupport / Spannvorrichtungsaufnahme	33677
17	1	2	Shock ring / Dämpfungsring	33681
18	1	-	Mounting hub (Metric) / Sicherungsring	34693+E
19	1	-	Washer flat / Unterlegscheibe	34802
20	4	8	HHC screw M12 x 30 - DIN 933, (1.0032)galv. / Sechskantschraube	41081-12045E278
21	8	8	HHC screw M12 x 45 - DIN 933, (1.0032)galv. / Sechskantschraube	41081-12045E278
22	12	16	Hex nut M12 - DIN 934, (1.0032)galv. / Sechskantmutter	41086-12BP
23	12	16	Washer flat M12 - DIN 125 A, (1.0032)galv. / Unterlegscheibe	41086-12AZP
24	12	16	Washer spring M12 - DIN 127 / Federling	41086-12AZP
25	7	6	Screw Sq M12x25 (DIN 479) / Vierkantschraube	41444-12025ZP



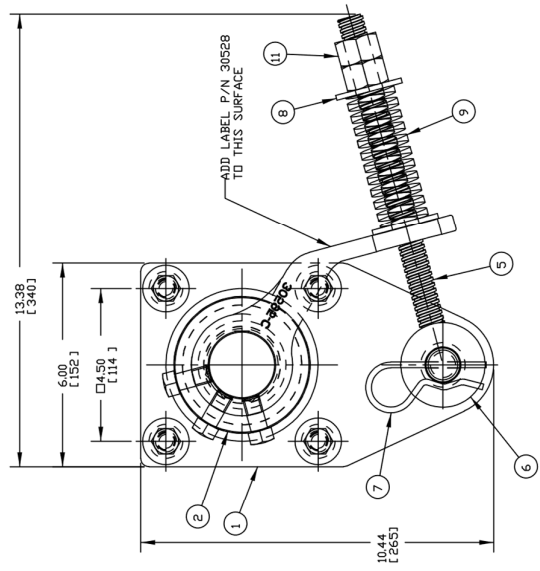
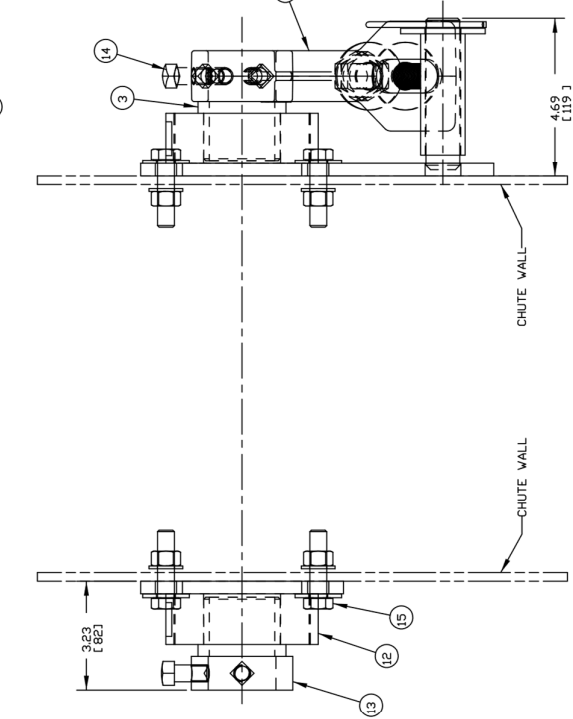
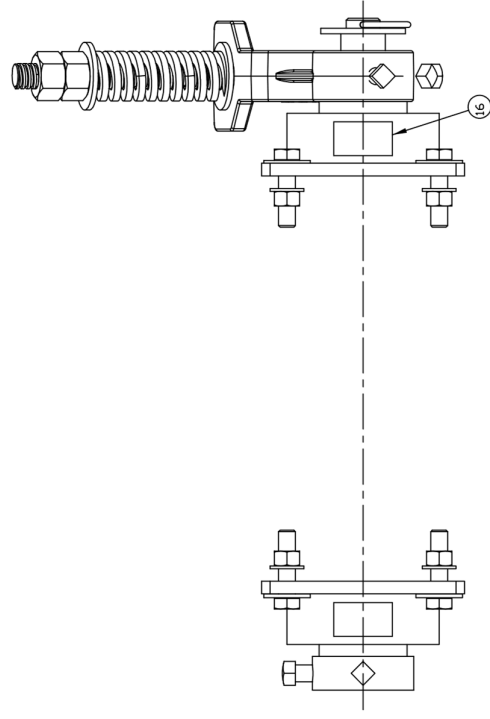
Dual  
Single

Part number / Teilenummer	
a	3143-a-abb-e-E
Type	Ausführung
Ø	Single
ZR	Dual
Body type	Cakläuseauführung
I:	Steel body (1.0037)
II:	Steel body with extended coupling
III:	Steel body with side cover (Black)
IV:	Steel body with side cover (Orange)
AV:	Steel body with side cover (Orange) / Edelstahlgehäuse (1.4571)
AV:	Steel body with side cover (Orange) / Edelstahlgehäuse (1.4571)
C	Finish
Ø	Orange (RAL 2004) - Standard
C	Orange (RAL 2004) - CSM

Martin Engineering GmbH 65396 Wulfen, Germany Tel: +49 619 2500-0 Fax: +49 619 2500-100 E-Mail: info@martin-engineering.com	
Date: 11.07.2011 Drawn: [Signature] Checked: [Signature]	
Title: TMS 125 Part No: 3143-a-abb-e-E Rev: 01	
Drawing No: 3143-a-abb-e-E	
Page 1/1	

ITEM	QTY.	DESCRIPTION	PART NUMBER
1	1	SPRING TENS MNT PLT VLDMT	38179
2	2	SHOCK RING	32501
3	2	NYLON BUSHING	33335
4	1	SPRING TENSIONER PADDL E ARM	30588-ST
5	1	ROD WELDMENT W/SS ROD	38176
6	1	WASHER FLAT 1 REGULAR ZP	32315
7	1	HAIRPIN COTTER .18 DIA X 3.56 ZP	35171
8	2	WASHER FLAT 3/4 WIDE ZP	20164
9	1	MEDIUM DUTY SPRING	32244-M
10	1	MEDIUM- HEAVY DUTY SPRING	32244-MH
11	2	NUT HEX 3/4-6 ACME ZP	38170
12	1	FLANGE PLATE WELDMENT	32496
13	1	MOUNTING HUB	16945
14	5	SCREW SHS 1/2-13NC X 1 SS	22763-03
15	1	MOUNTING HARDWARE KIT	34498
16	2	LABEL MARTIN PRODUCTS	32238
17	1	LABEL PINCH POINT WARNING	30528
18	2	LABEL CONVEYOR PRODUCTS WARNING	123395
19	1	LABEL SPRING TENSIONER	32259
20	1	MANUAL OPERATORS	M3265

SEE NOTE 3  
SEE NOTE 3 NS  
NS = NOT SHOWN



- NOTES:
- 1) DIMENSIONS ARE GIVEN IN INCHES (MM).
  - 2) ALL DIMENSIONS ARE FOR REFERENCE ONLY.
  - 3) TENSIONER IS ASSEMBLED FOR USE ON PRIMARY PRE-CLEANERS (WITH THE GREEN SPRING P/N 32244-M). CHANGE SPRING FOR USE ON SECONDARY CLEANERS (WITH THE BLUE SPRING P/N 32244-MH).
  - 4) P/N'S 32244-MH, 23395, AND 32259 TO BE SHIPPED LOOSE. INSTALL SHIPPED LOOSE LABELS ON CHUTE WALL NEXT TO TENSIONER.
  - 5) SHIP ONE COPY OF DRAWING 38180 WITH ASSEMBLY.
  - 6) WEIGHT: 22.0 LBS.

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DRAWN	RND	NEP/NS/ET
DATE	8/6/2007	ILLINOIS
CHECKED		USA
ENG.	KJB	MARTIN
DATE	07/28/07	ENGINEERING
TITLE	STANDARD DUTY SINGLE SPRING TENSIONER ASM	
DATE	F/48.0 BELTS & BELOW	
HRD		
DATE	07/22/07	
APPROVED DR		
DATE	07/26/07	
SCALE	38180	

NO.	DESCRIPTION	ECN	DATE	BY
	REVISION <td></td> <td></td> <td></td>			

38180

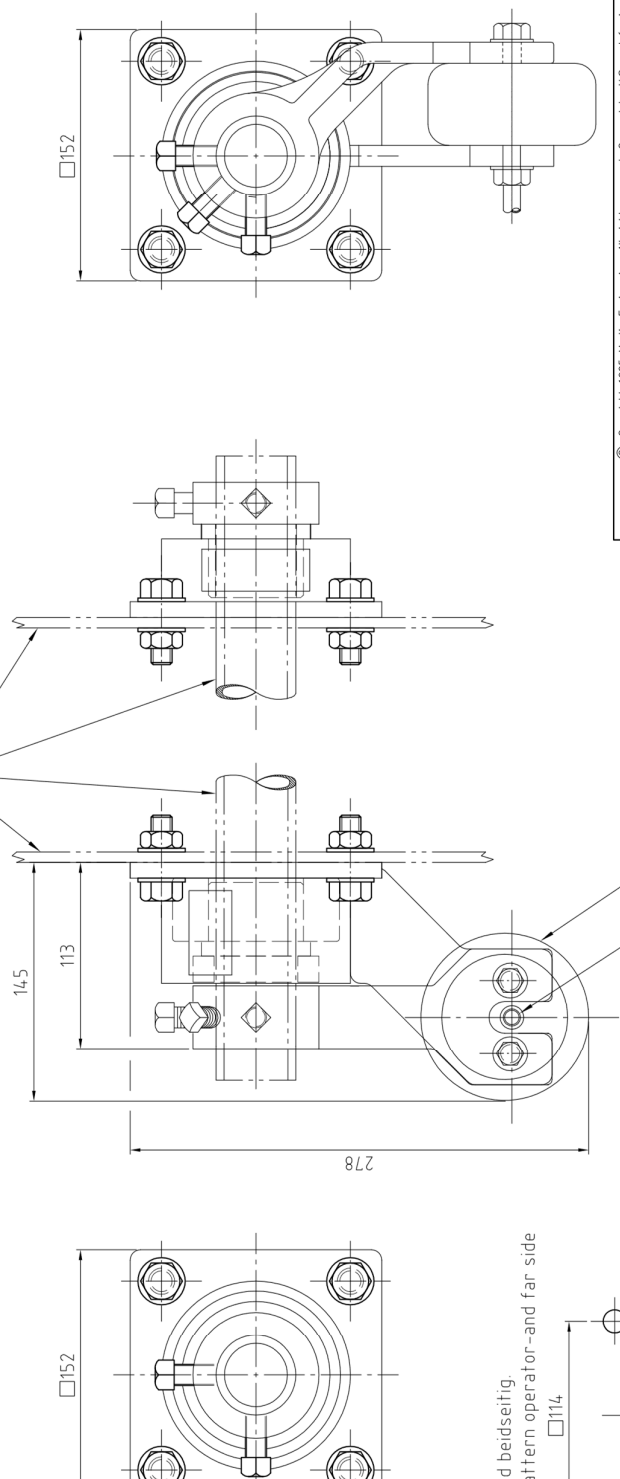
	Pos./Item	Anz./Qty	Beschreibung / Description	Teile-Nr./P/N
	1	1	Gummidämpfungs-Luftspanner / Shockmount air paddle tensioner	32745
	2	1	Reduziernippel 1/4" NPT 00-G1/4" ID / Reducer nipple	41254-02

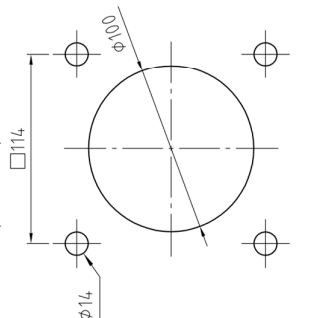
Bemerkung:  
 1) Alle Maße sind in mm.  
 2) Alle Maße ca. Angaben

Note:  
 1) All dimension are given in mm.  
 2) All dimensions are for reference only.

Nur zur Verdeutlichung gezeigt.  
 Only shown for clarity.



Bohrbild beidseitig.  
 Hole pattern operator- and far side



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**MARTIN ENGINEERING GMBH**  
 In der Rehbach 14  
 65396 Walluf  
 GERMANY

Drawn: sbe  
 Date: 14.05.2008  
 Kontrolliert  
 Checked  
 Eng.:  
 Date:  
 Appr.:  
 Date:  
 Plott  
 Date: 14.05.2008  
 Ms./Sc.: 1:2.5

C	Benennung Title		
B			
A	Zzeichnung komplett überarbeitet.	14.05.08	sbe
Nr. No.	Benennung (Description)	Datum Date	Name by
Änderung (Revision)			
Gummidämpfungs-Luftspanner Shockmount air paddle tensioner			
32745+E			



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