



SPX1280 Presentation

REVISION		0	
ISSUED BY	ENRICO P.	DATE OF RELEASE	30/09/2019
REVISIONED BY	IGOR P.	DATE OF REVISION	30/09/2019

APPLIED TO MODELS	SPD-SERIES	☐ SPD265	☐ SPD360	☐ SPD500	☐	☐
	JF-SERIES	☐ JF30	☐ JF40	☐ JF365	☐ JF545	☐ JF990
	SPX-JUNIOR	☐ SPB209	☐ SPX312	☐ SPX424	☐ SPX429	☐
	SPX-SENIOR	☐ SPX527	☐ SPX536	☐ SPX1040	☐ SPX1275	☐
	MPK-SERIES	☐ MPK20	☐ MPK50	☐	☐	☐
	NEW SERIE	☐ SPX532	☒ SPX1280	☐	☐	☐
	OTHERS	☐ SPK 60	☐ OTHER	☐ TOOLS	☐ INSTRUMENT	☐

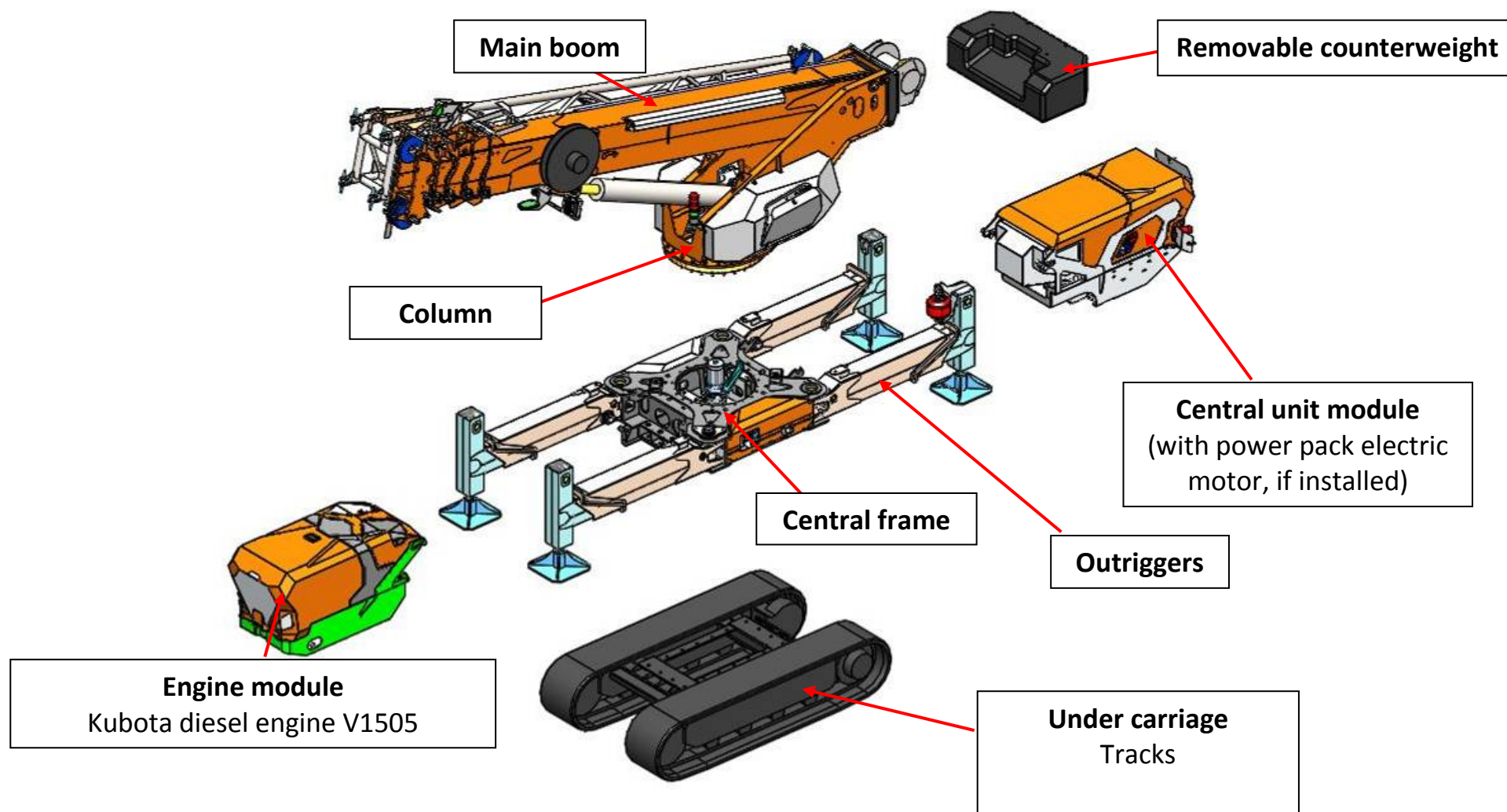


INDEX

1.	MODULARITY.....	3
2.	VERSIONS AVAILABLE	4
2.1.	ACRONYM.....	4
3.	OVERALL DIMENSIONS.....	5
3.1.	MACHINE FOLDED	5
3.2.	FOOTPRINT	6
3.3.	TRACKS RETRACTED vs TRACKS EXTENDED.....	7
4.	OVERALL INFORMATION.....	8
5.	HOIST PERFORMANCE.....	9
6.	MAIN FEATURES	10
6.1.	LMI (LOAD MOMENT INDICATOR)	10
6.2.	GSC (GEOMETRICAL STABILITY CONTROL)	11
6.3.	P&C (PICK & CARRY)	12
6.4.	DTC (DIAGNOSTIC TROUBLE CODES)	13
6.5.	PLUG & PLAY ATTACHMENT	14
6.6.	SPEED REDUCTION	15
6.7.	POWER MODES OF THE ENGINE.....	16
6.8.	OUTRIGGERS SELF-LEVELING.....	17
7.	OPTIONALS AND ACCESSORIES	18
7.1.	JIB ACRONYMS.....	19
7.2.	POWER PACK ACRONYMS	19
7.3.	EXTENDABLE TRACKS.....	20



1. MODULARITY





2. VERSIONS AVAILABLE

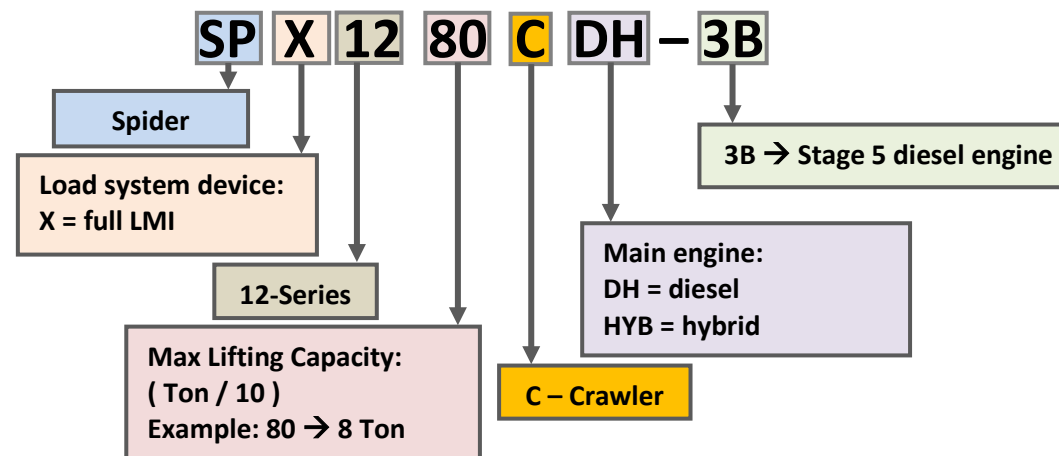
Machine available in version:

- **SPX1280CDH-3B** Kubota diesel engine STAGE 5

Power pack available (optional):

- **PP400-11D.V06** Three-phase electric motor (50Hz 400V-11kW)
- **PP220-8D.V07** Mono-phase electric motor for U.S.A. (60Hz 220V-8kW)

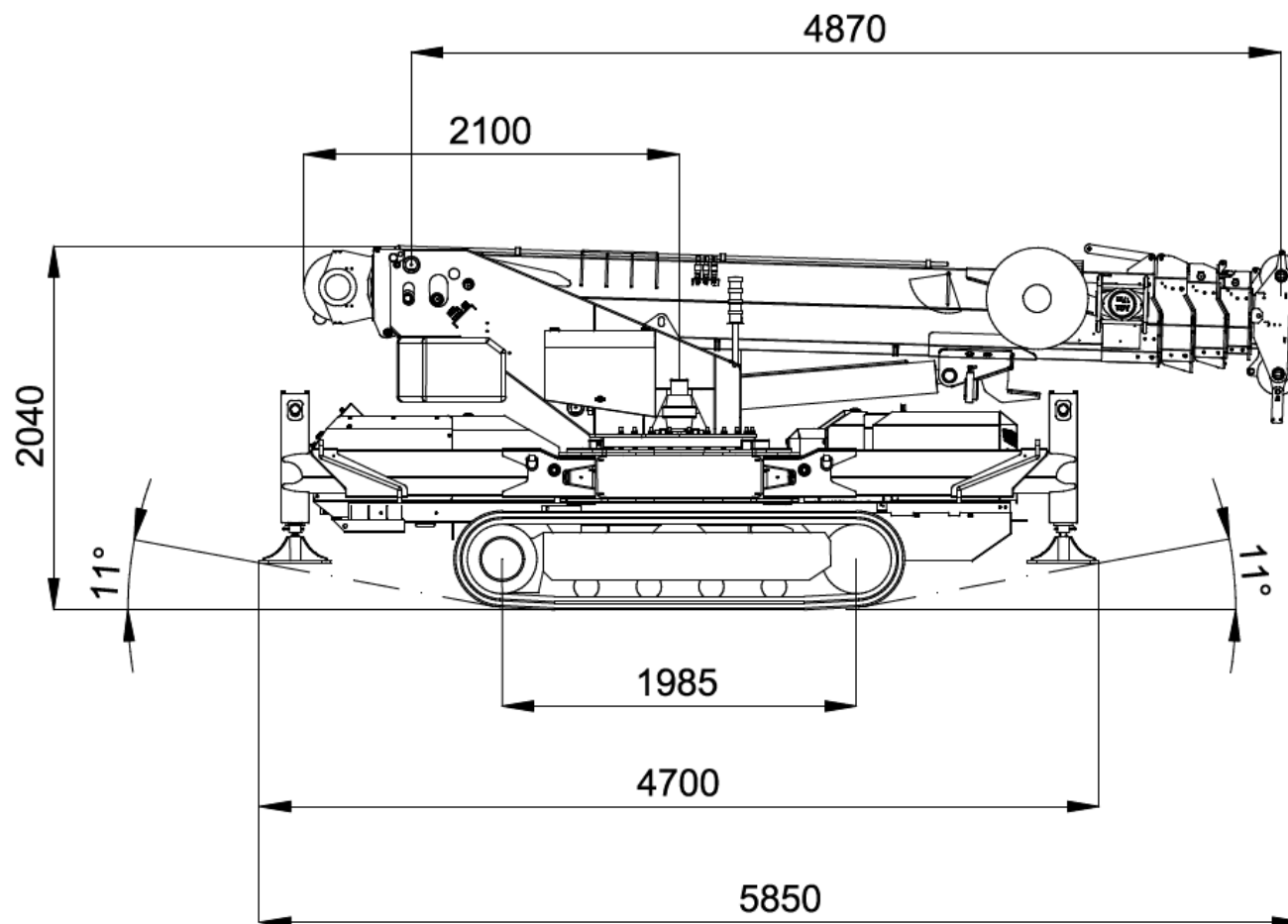
2.1.ACRONYM





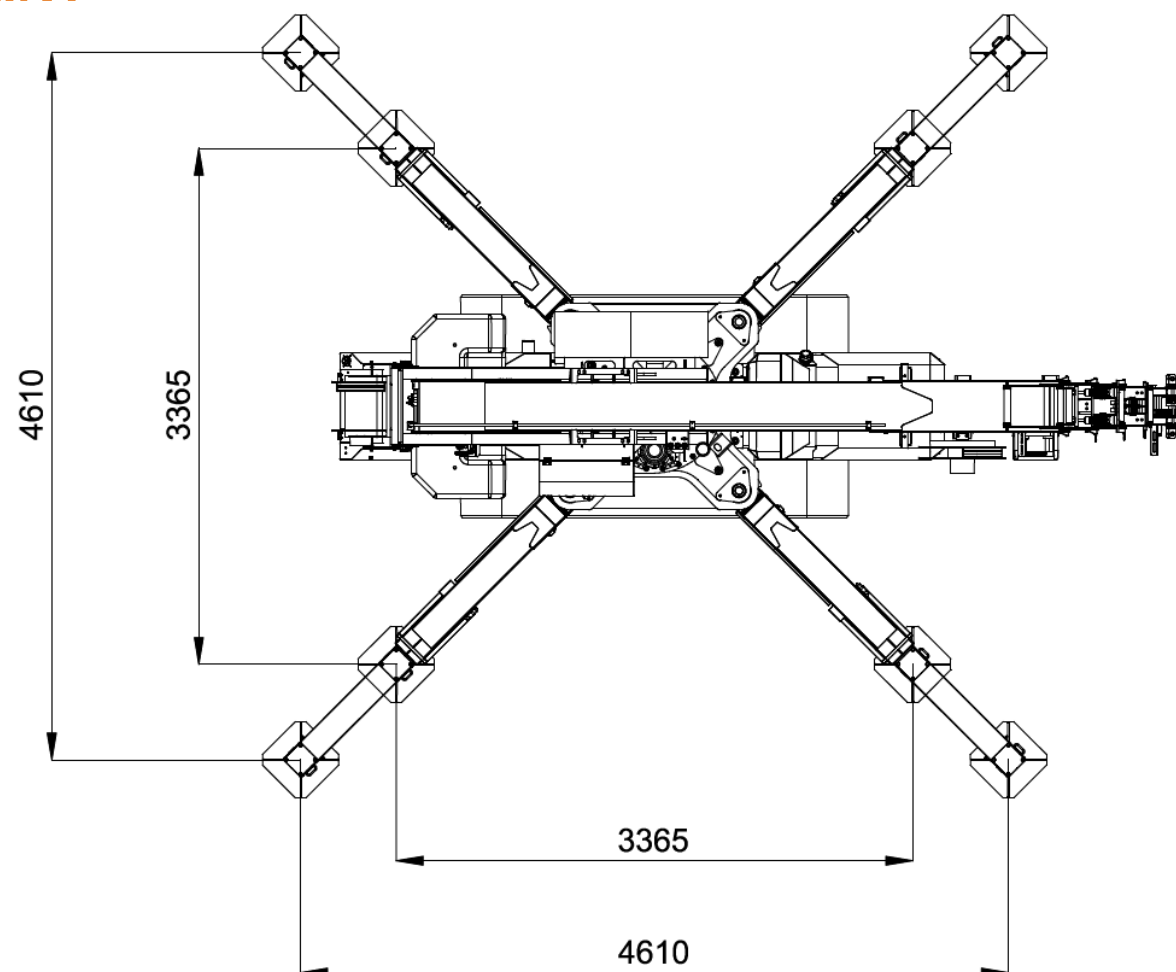
3. OVERALL DIMENSIONS

3.1. MACHINE FOLDED



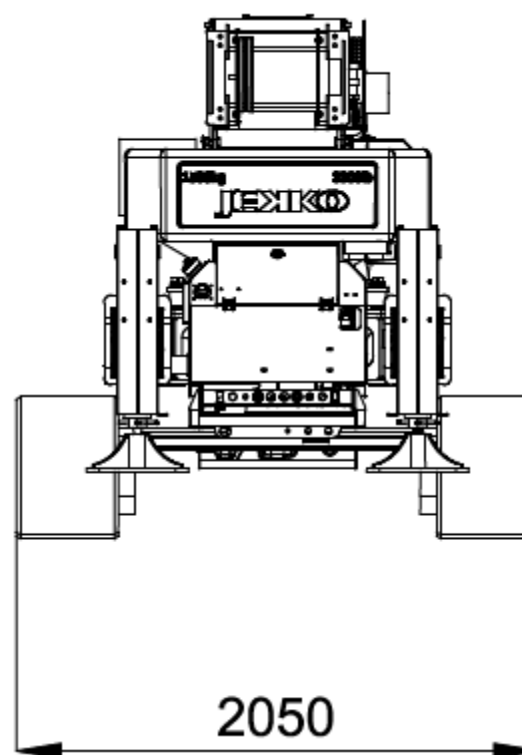
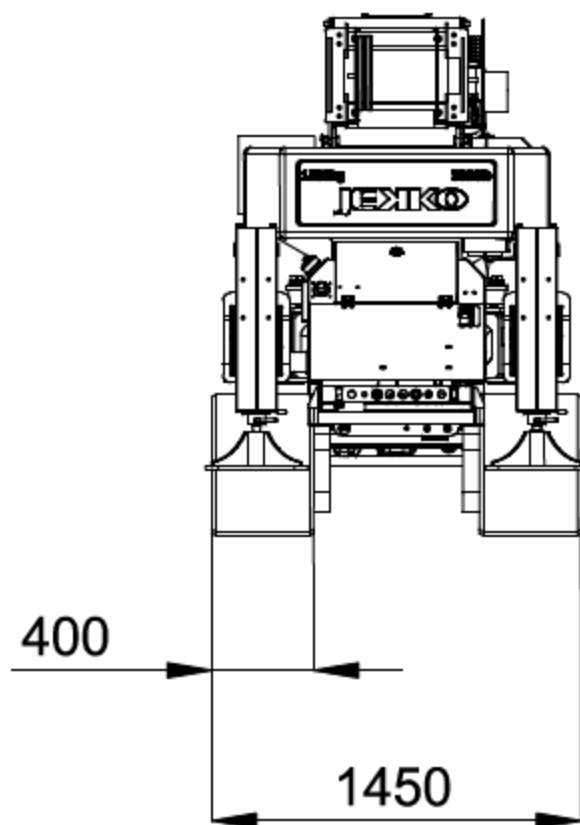


3.2. FOOTPRINT





3.3. TRACKS RETRACTED vs TRACKS EXTENDED





4. OVERALL INFORMATION

WEIGHTS		Name / version	kg ¹
		2B	6900
		HYB	6950
		2B & HYB	1500
		SINGLE FALL	42
		MULTIPLE FALL	110
		PP400-11D.V*	140
		3500G	70
		1500.1FL	265
		1500.3HL	675
		300GR	245
		HA-SPX1280	40
		WUK-04	3

*: Only for 2B version

¹: Dry weight

²: Engine working limit

³: Static lifting

ENGINE (2B ONLY)		KUBOTA V1505-E4B	
		18,5kW / 25HP	
		DIESEL	
		L	24
HYBRID		KUBOTA D1105-E4B	
		18,5kW / 25HP	
		DIESEL	
		L	24
HYDRAULIC		48V 300Ah	
		48V-3F 13kW / 17,5HP	
		ISO 6743-4:HFDU with VG46 viscosity class	
		Working temp	<70°C
		L	105

MOVEMENTS		km/h	1,3 / 2,8
		20° (36%) ²	
		kg/cm ²	0,72
		kg	6800 ³
		0°/75°	
		s	35
		360°	
		rpm	1,0
		m	4,9 - 17,7
		s	40



5. HOIST PERFORMANCE

HOIST PERFORMANCE	Winch	Layer	Max line pull	Standard rope speed	Highest rope speed
			kg	m/min	m/min
		1	2072 ¹	46,4	83,5
		2	1893 ¹	50,7	91,4
		3	1743 ¹	55,1	99,3
		4	1615 ¹	59,5	107,2
		5	1504 ¹	63,8	115,1
	Rope	Wire rope	Ø	Total lenght	Max load
			mm	m	kg
		19x7 right lang lay Non rotating	10	125	9480
	Hook block	Load	N° of		Block type
		kg	Sheaves	Lines	
		8000	3	6	Multiple fall block
		7500	3	5	
		6000	2	4	
		4500	2	3	
		3000	1	2	
		1500	-	1	Single fall block

¹:LMI limited at 1500 kg

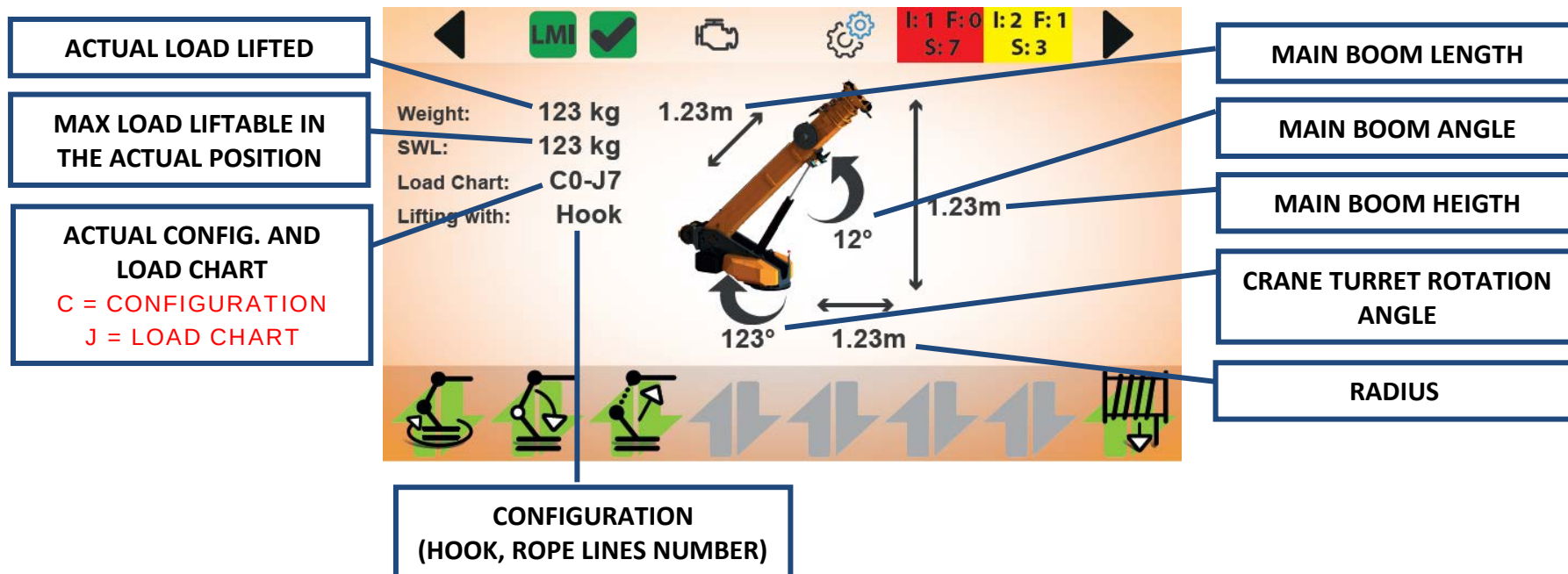


6. MAIN FEATURES

6.1. LMI (Load Moment Indicator)

It's the load safety system of the machine, which shows in real time:

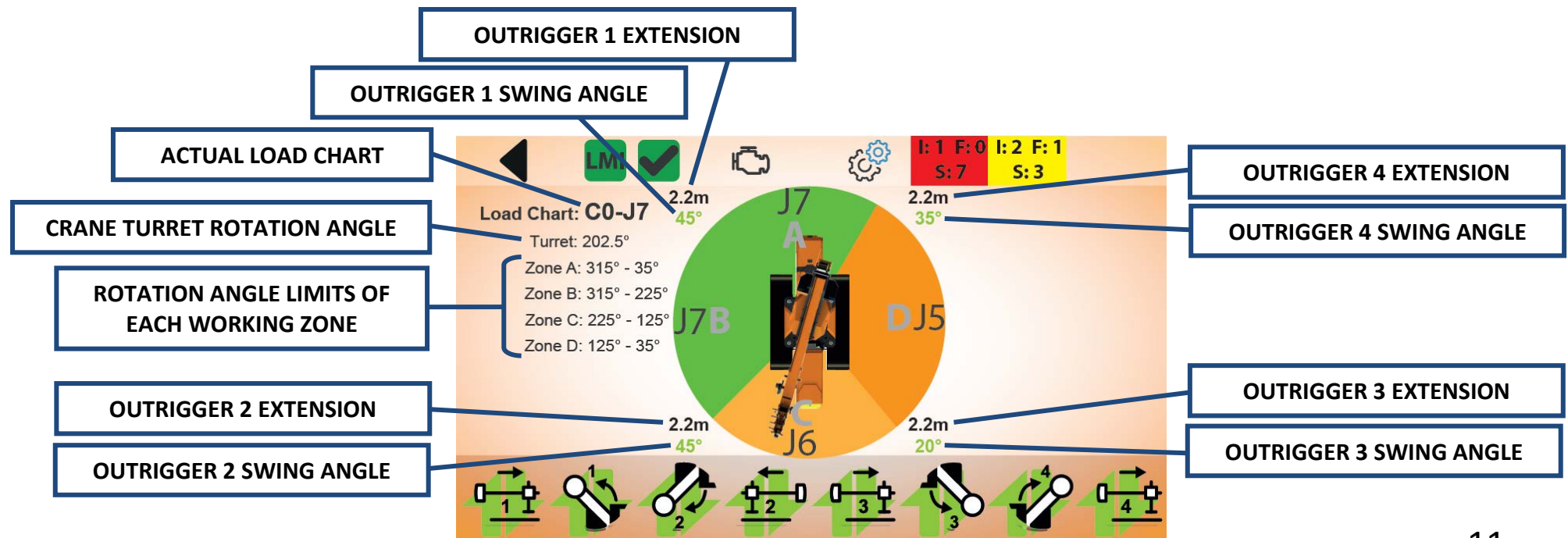
- **Crane geometrical info:** length, angle, radius, height, crane turret rotation angle;
- **Weight:** load applied to the tip of crane in real time;
- **SWL (safe working load):** maximum lifting capacity of the crane in the actual position
- **Load chart:** actual configuration of the machine and load chart;
- **Lifting with:** hook or rope lines/falls number.



6.2. GSC (Geometrical Stability Control)

It's the stability system of the machine, which shows in real time:

- **Load chart:** actual configuration of the machine and load chart (according to actual turret rotation angle);
- **Boom:** it is the actual crane turret rotation angle;
- **Zones:** these are the angle values that delimit the working area;
- **Outriggers length extension values:** length extension of each outrigger
- **Outriggers swing rotation angles:** opening angle of each outrigger.



6.3.P&C (Pick & Carry)

The SPX1280 can operate pick & carry using the main boom (J1 load chart) in many versatile ways:

- **with wide tracks:** it allows to operate at 360° with turret rotation!
- **with narrow tracks:** the crane rotation locking pin must be inserted (turret at 0°)

*Pick & carry with main boom
(with wide tracks)*

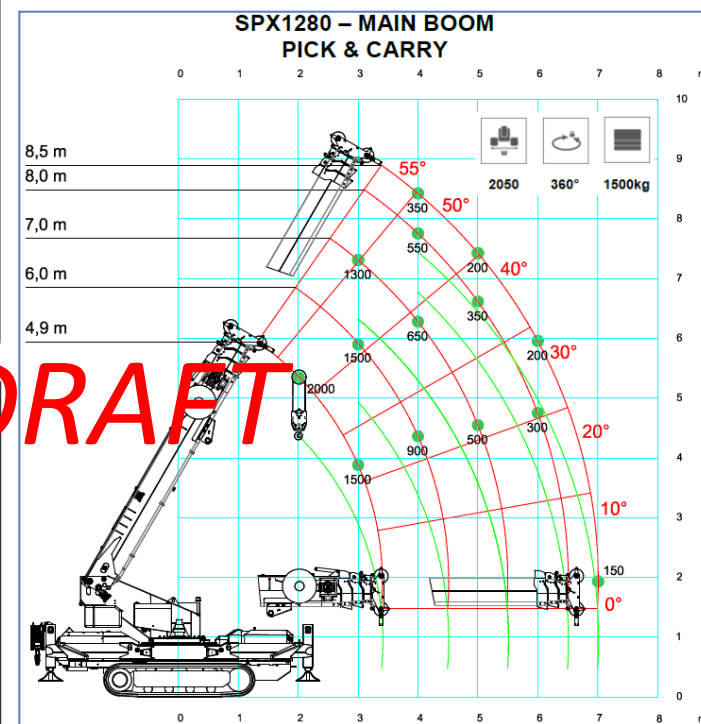
[m]						EN
[ton]	MAIN BOOM	2050	>0km/h	360°	1500kg	
	4,9	5,5	6,5	7,5	8,5	
2,0	2,0	2,0	2,0	1,0	0,50	
3,0	1,5	1,5	1,3	0,75	0,45	
4,0		0,9	0,65	0,55	0,35	
5,0			0,5	0,35	0,2	
6,0				0,3	0,2	
7,1					0,15	

LC1280_V100_0519_MB_CW_1500_CINGOLI

*Pick & carry with main boom
(with narrow tracks)*

[m]						EN
[ton]	MAIN BOOM	1450	>0km/h	0°	1500kg	
	4,9	5,5	6,5	7,5	8,5	
2,0	2,0	2,0	2,0	1,0	0,50	
3,0	1,5	1,5	1,3	0,75	0,45	
4,0		0,9	0,65	0,55	0,35	
5,0			0,5	0,35	0,2	
6,0				0,3	0,2	
7,1					0,15	

LC1280_V100_0519_MB_CW_1500_CINGOLI





6.4.DTC (Diagnostic Trouble Codes)

All alarm&warning codes are listed in a document, which makes troubleshooting service easier and faster.

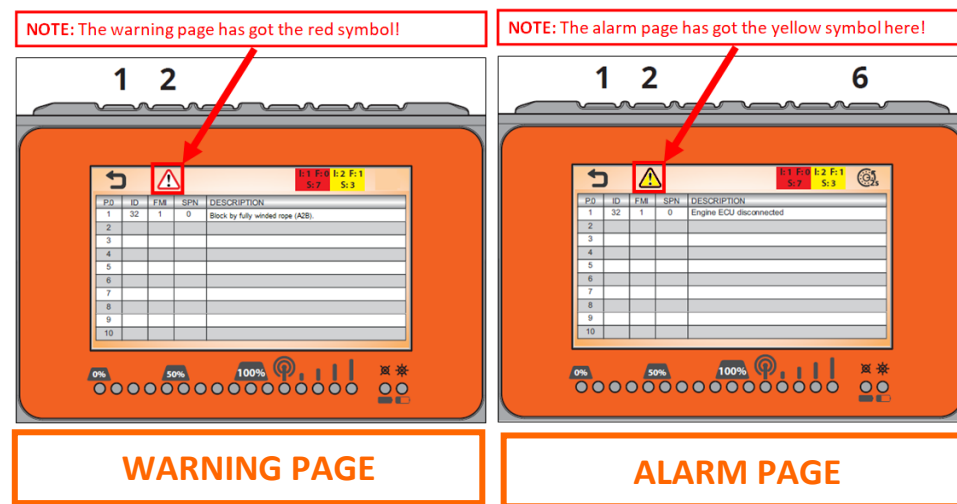
Moreover, on the remote control screen, there are two pages to display active alarms and active warnings: this helps the operator to understand and possibly solve by himself the block/faults.

ALARM & WARNING CODES:

Each alarm or warning code is composed by:

- **ID:** is the can bus unit/electronic device involved (example: 1 = SPN06)
- **FMI:** is the family/group;
- **SPN:** a generic progressive number; each family (FMI) has its own list which could restart from 1 or not.

For further information, please check the SPX1280 Quickstart Guide or the Alarms list table.



6.5. PLUG & PLAY ATTACHMENT

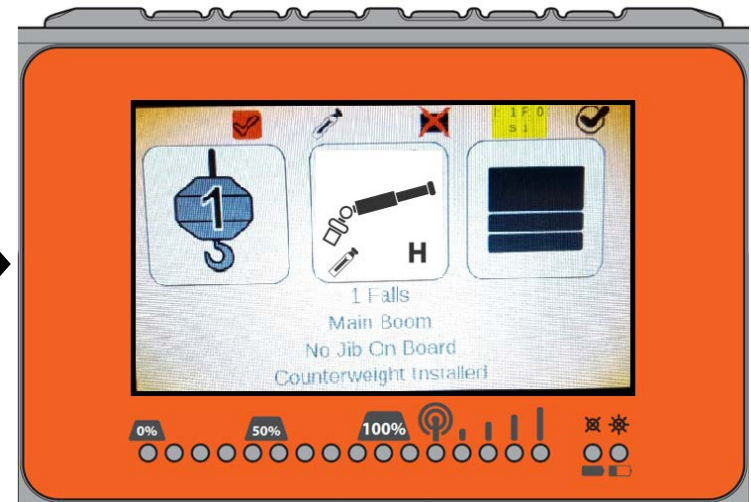
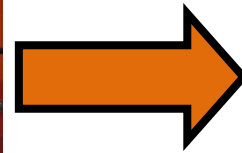
All the available attachments for the crane once installed and connected hydraulically and electrically to the main boom plug are self-detected by the LMI.

The operator only have to confirm/set the working configuration (hook or winch mode).

By connecting the “TOOL” plug on tip of main boom, the system will recognize automatically the jib installed and ask for configuration confirmation on the remote control display.



“TOOL” plug on tip of the main boom

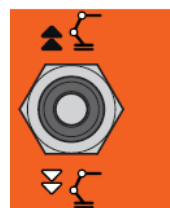
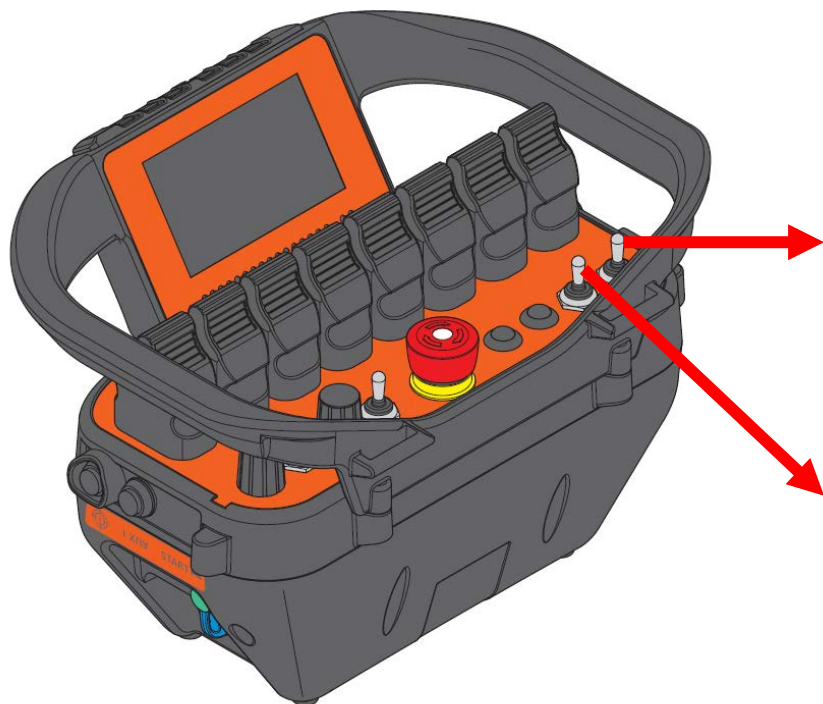


LMI screen on the remote control display

6.6. SPEED REDUCTION

On the remote control there are two selectors fully dedicated to the speed reduction of:

- winch and tracks functions;
- all crane functions (included winch).



**Increase speed of all crane functions
(winch included)**



**Reduce speed of all crane functions
(winch included)**



Increase winch and tracks speed

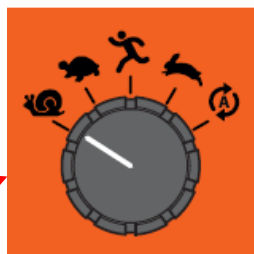


Reduce winch and tracks speed

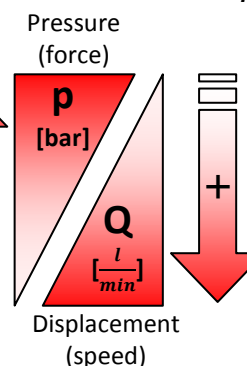
6.7. POWER MODES OF THE ENGINE

The operator can select the engine power mode by rotating the *Engine power mode selector* on the remote control: the power modes adjust the working pressure (force), the oil displacement (speed) and therefore the performance of the crane.

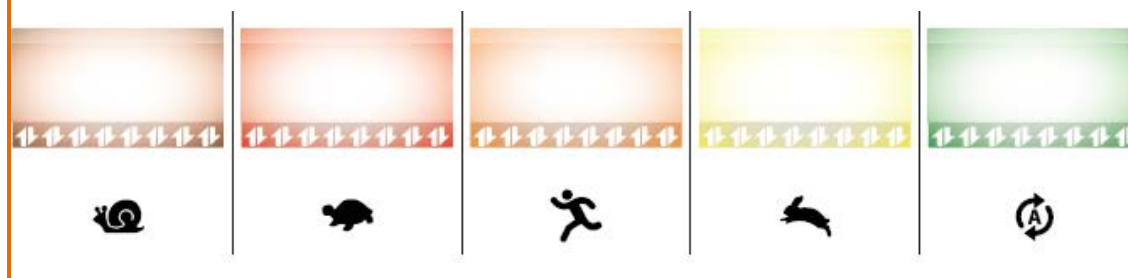
$$P [W] = p [bar] \times Q [\frac{l}{min}]$$



-  **Min. Speed (Max Power)**
-  **Slow Speed**
-  **Fast Speed**
-  **Super Fast Speed**
-  **Auto Mode (Speed VS Force)**

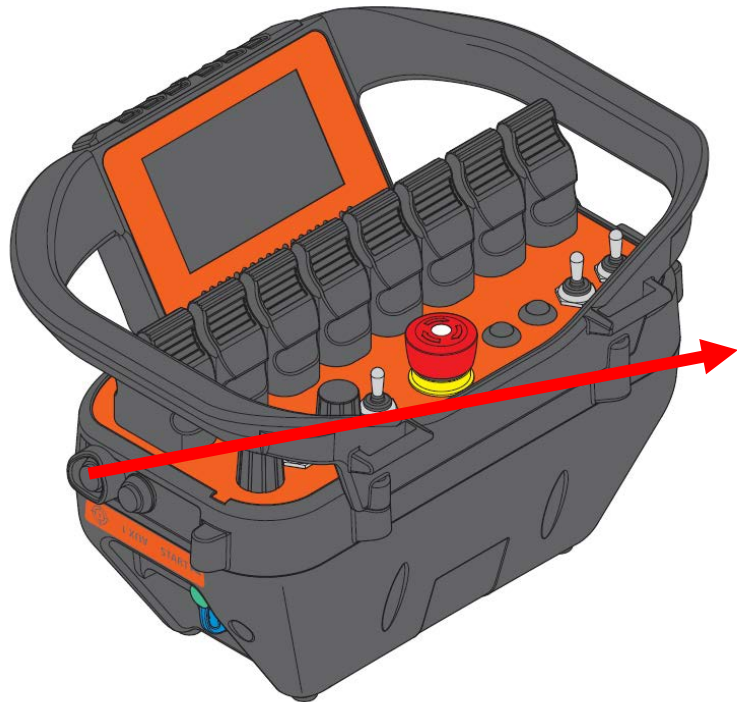


According to the power mode selected, the background color of the remote control screen will change



6.8. OUTRIGGERS SELF-LEVELING

Thanks to the new hydraulic system design and to the carrier inclination sensor, the SPX1280 can be stabilized automatically by holding the *Self-leveling button* on the remote control (if the conditions are satisfied).



NOTE:

The self-leveling function will operate only outriggers down maneuvers (LIFTING UP THE MACHINE) and it stops when you release the button or when carrier's inclination is 0° on both axes.

CONDITIONS:

Self-leveling function can be operated if:

- All outriggers are already on the ground;
- All outriggers swing angles are >15° (16° minimum)
- All outriggers swing angles are similar ($\pm 4^\circ$)

(example1: Outr.#1 = 10° → SELF-LEVELING NOT POSSIBLE!)

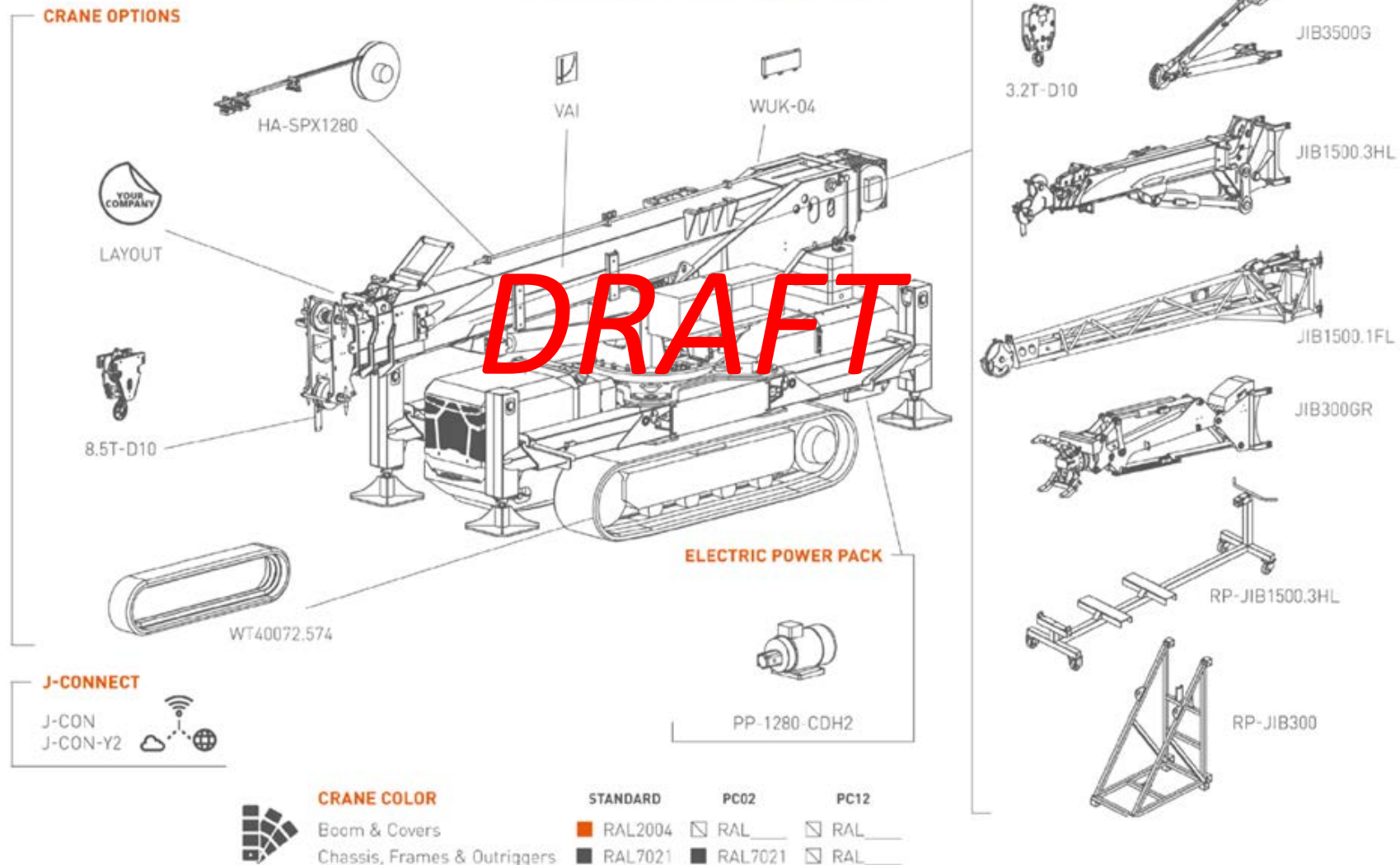
example2: Outr.#1 = 16° → $16^\circ \leq (\text{Outr.}\#2 \ \& \ \text{Outr.}\#2 \ \& \ \text{Outr.}\#4) \leq 20^\circ$

example3: Outr.#1 = 30° → $26^\circ \leq (\text{Outr.}\#2 \ \& \ \text{Outr.}\#2 \ \& \ \text{Outr.}\#4) \leq 34^\circ$

example4: Outr.#1 = 45° → $41^\circ \leq (\text{Outr.}\#2 \ \& \ \text{Outr.}\#2 \ \& \ \text{Outr.}\#4) \leq 45^\circ$

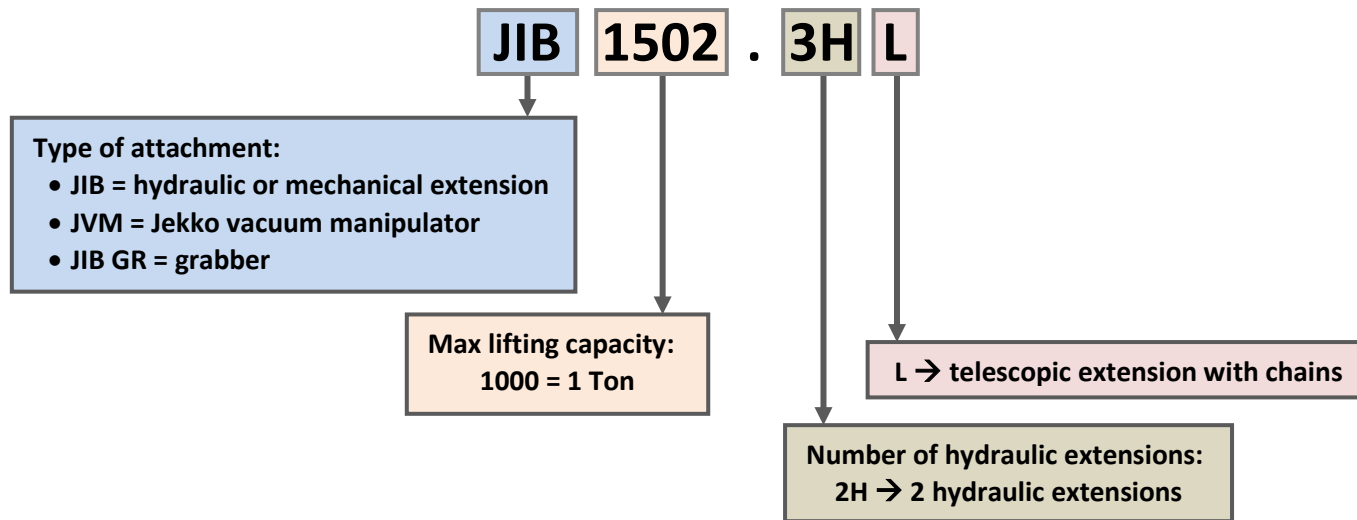
7. OPTIONALS AND ACCESSORIES

SPX1280CDH-3B

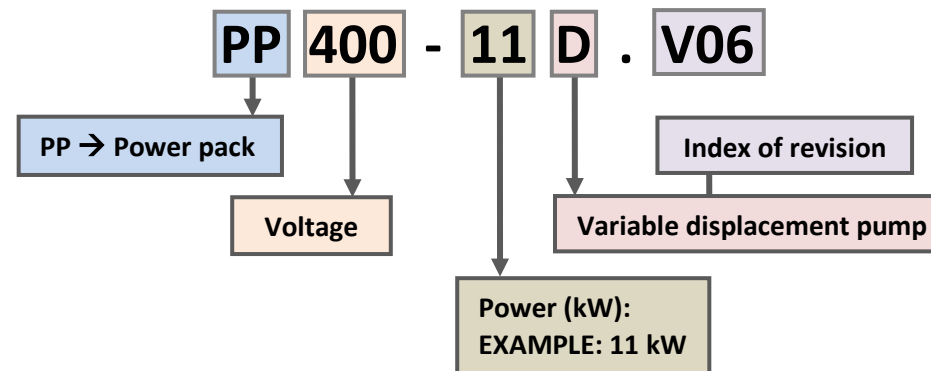




7.1. JIB ACRONYMS



7.2. POWER PACK ACRONYMS

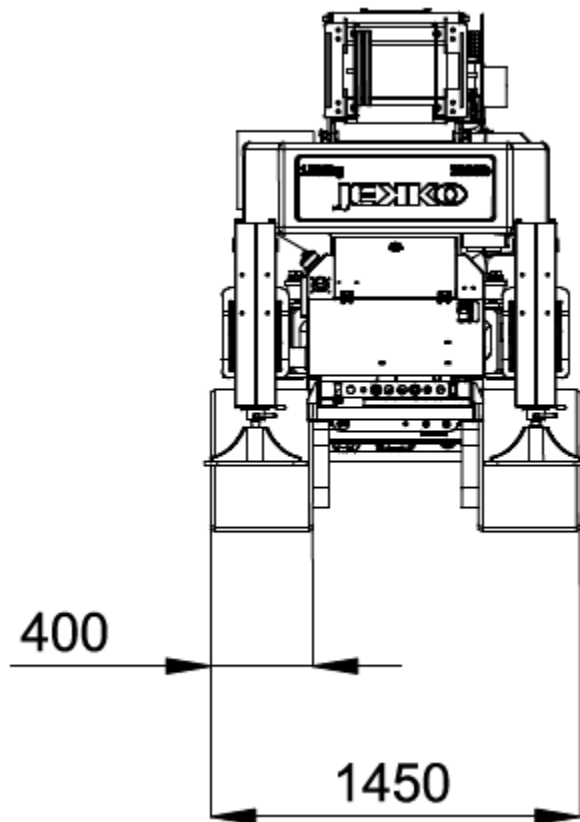




7.3. EXTENDABLE TRACKS

The extendable tracks make it easier climbing on ramps.
Moreover, they can be helpful to drive the machine on steep terrain.
It also gives the 360° turret rotation in Pick & Carry mode.

Tracks retracted



Tracks extended

