

LatAm SER S&OP 2026 - EXPO

Station: Valmet Shutdown Planning

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Shutdown Planning

Brief history

- Shutdown Planning program in Brazil arose in 2013.
- Challenges identified to deliver spare parts to mill shutdowns, especially Suzano Mucuri in 2013.
- Improvement of Valmet Sweden concept and adaptation to Brazilian culture.

Peças de reposição paradas programadas

Objetivo: Suporte Eficaz ao Planejamento de Manutenção

- Oferecer maior suporte ao cliente para atender as necessidades de peças de reposição, relacionadas com as paradas de manutenção;
- Reduzir a carga de trabalho dos planejadores e os recursos da cadeia de suprimentos do cliente;
- Otimizar o uso de peças de reposição contidas no estoque do cliente;
- Recomendar somente as peças de reposição necessárias para atender um determinado escopo de manutenção;
- Recomendar as peças de reposição mais recentes quando disponíveis;
- Oferecer recursos e supervisão de trabalhos de manutenção quando necessário.



Lições Aprendidas na PG L2 2014

Valmet

Lições Positivas

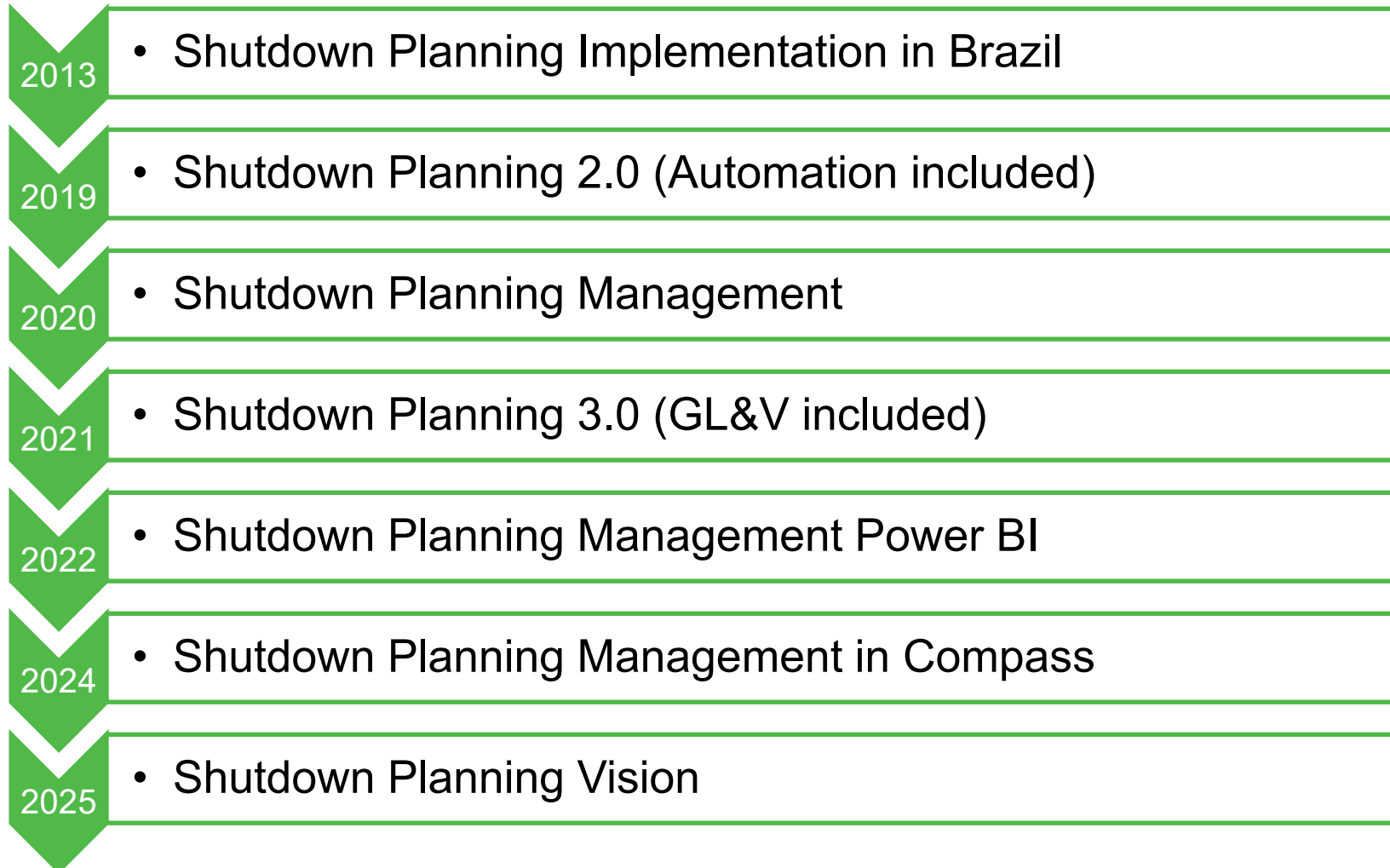
- 100% das peças chegaram antes do início da PG
- Parada, visão sobressalentes, transcorreu de uma maneira geral de forma tranquila em comparação a PG do ano anterior;
- Ausência de horas extras para fabricação de spare parts em caráter de emergência
- Follow-up semanal das entregas das peças
- Reestruturação da equipe atendimento a Suzano

Lições a Melhorar

- Entregar Spare Parts com no máximo duas semanas (considerando em Mucuri) de antecedência a PG;
- Vestimentas (Telas) faltando abas durante a instalação dos setores do PDG e PDW.

Shutdown Planning

Timeline



Shutdown Planning

Purpose

- Powerful concept to meet customers' spare parts, consumables and service needs while fulfilling Valmet's internal business goals.
- Enhance customer satisfaction by mitigating risks related to spare part availability and addressing potential concerns throughout all phases of the shutdown: before, during, and after.



Shutdown Planning

To support maintenance planning effectively



Close to you

- Reduce the workload for work planners and the customer's supply chain teams.
- Assist the customer in clearly defining the spare parts requirements for maintenance shutdowns.
- Minimize emergency purchases and reduce unplanned transportation costs.



People you can trust

- Provide a comprehensive and straightforward recommendation of spare parts aligned with the defined maintenance scope.
- Optimize inventory management to ensure efficient utilization of spare parts for both Valmet and the customer.
- Schedule and execute planned deliveries, ensuring all goods are shipped prior to the shutdown.



Solution to your needs

- Recommend upgraded product versions when available to enhance performance and reliability.
- Provide qualified resources and oversight for maintenance activities as required.

Prevent unplanned shutdowns by ensuring timely availability and support of critical spare parts

Shutdown Planning

Annual Shutdown Clock Cycle



Shutdown Planning

Spare Parts Recommendation

INTERNAL



Lista de Recomendação - Parada Geral 2025												
Modelo	TAG	SN	Posição	PN - Valmet	Desenho	Descr. Dese.	Descrição do Item	Qt. P/ PG	Uni.	Prazo de entrega (Dias)	Observação	NI
Bin Discharger, CBB 50	32900-M-0001	SN00021175	13	SHAV003178-01	SHAV003174.00	CHIP BIN VB CBB	RUBBER SEALING	1	pç	100	CJ DE VEDAÇÃO SUPERIOR	1234
Bin Discharger, CBB 50	32900-M-0001	SN00021175	14	VAL0186499	SHAV003174.00	CHIP BIN VB CBB	COLA	1	pç	90	CJ DE VEDAÇÃO SUPERIOR	5678
Bin Discharger, CBB 50	32900-M-0001	SN00021175	17	VAL0174497	SHAV003174.00	CHIP BIN VB CBB	BAND	40	m	100	CJ DE VEDAÇÃO SUPERIOR	9876
Bin Discharger, CBB 50	32900-M-0001	SN00021175	18	VAL0174416	SHAV003174.00	CHIP BIN VB CBB	LOCK	12	pç	90	CJ DE VEDAÇÃO SUPERIOR	1234
Bin Discharger, CBB 50	32900-M-0001	SN00021175	19	SAU3-7370185-01	SHAV003174.00	CHIP BIN VB CBB	STRIP CLAMP	40	pç	30	CJ DE VEDAÇÃO SUPERIOR	5678
Bin Discharger, CBB 50	32900-M-0001	SN00021175	20	VAL0178018	SHAV003174.00	CHIP BIN VB CBB	G-LINK	20	pç	30	CJ DE VEDAÇÃO SUPERIOR	9876
Bin Discharger, CBB 50	32900-M-0001	SN00021175	22	VAL0120394	SHAV003174.00	CHIP BIN VB CBB	MOLA PRATO	480	pç	30	CJ DE VEDAÇÃO SUPERIOR	1234
Bin Discharger, CBB 50	32900-M-0001	SN00021175	11	VAL0177030	B13015-0013	CHIP BIN VB CBB	RUBBER CLOTH	2	pç	150	CJ VEDAÇÃO CHUTE INFERIOR	5678
Bin Discharger, CBB 50	32900-M-0001	SN00021175	11	VAL0175416	B13015-0013	CHIP BIN VB CBB	CLAMPING STRIP	12,4	m	100	CJ VEDAÇÃO CHUTE INFERIOR	9876
Bin Discharger, CBB 50	32900-M-0001	SN00021175	11	VAL0186499	B13015-0013	CHIP BIN VB CBB	COLA	2	pç	90	CJ VEDAÇÃO CHUTE INFERIOR	1234
Bin Discharger, CBB 50	32900-M-0021	SN00021176	13	SHAV003178-01	SHAV003174.00	CHIP BIN VB CBB	RUBBER SEALING	1	pç	70	CJ DE VEDAÇÃO SUPERIOR	5678
Bin Discharger, CBB 50	32900-M-0021	SN00021176	14	VAL0186499	SHAV003174.00	CHIP BIN VB CBB	COLA	1	pç	90	CJ DE VEDAÇÃO SUPERIOR	9876
Bin Discharger, CBB 50	32900-M-0021	SN00021176	17	VAL0174497	SHAV003174.00	CHIP BIN VB CBB	BAND	40	m	30	CJ DE VEDAÇÃO SUPERIOR	1234
Bin Discharger, CBB 50	32900-M-0021	SN00021176	18	VAL0174416	SHAV003174.00	CHIP BIN VB CBB	LOCK	12	pç	30	CJ DE VEDAÇÃO SUPERIOR	5678
Bin Discharger, CBB 50	32900-M-0021	SN00021176	19	SAU3-7370185-01	SHAV003174.00	CHIP BIN VB CBB	STRIP CLAMP	40	pç	30	CJ DE VEDAÇÃO SUPERIOR	9876
Bin Discharger, CBB 50	32900-M-0021	SN00021176	20	VAL0178018	SHAV003174.00	CHIP BIN VB CBB	G-LINK	20	pç	30	CJ DE VEDAÇÃO SUPERIOR	1234
Bin Discharger, CBB 50	32900-M-0021	SN00021176	22	VAL0120394	SHAV003174.00	CHIP BIN VB CBB	MOLA PRATO	480	pç	120	CJ DE VEDAÇÃO SUPERIOR	5678
Bin Discharger, CBB 50	32900-M-0021	SN00021176	11	VAL0177030	B13015-0013	CHIP BIN VB CBB	RUBBER CLOTH	2	pç	150	CJ VEDAÇÃO CHUTE INFERIOR	9876
Bin Discharger, CBB 50	32900-M-0021	SN00021176	11	VAL0175416	B13015-0013	CHIP BIN VB CBB	CLAMPING STRIP	12,4	m	30	CJ VEDAÇÃO CHUTE INFERIOR	1112
Bin Discharger, CBB 50	32900-M-0021	SN00021176	11	VAL0186499	B13015-0013	CHIP BIN VB CBB	COLA	2	pç	20	CJ VEDAÇÃO CHUTE INFERIOR	1234

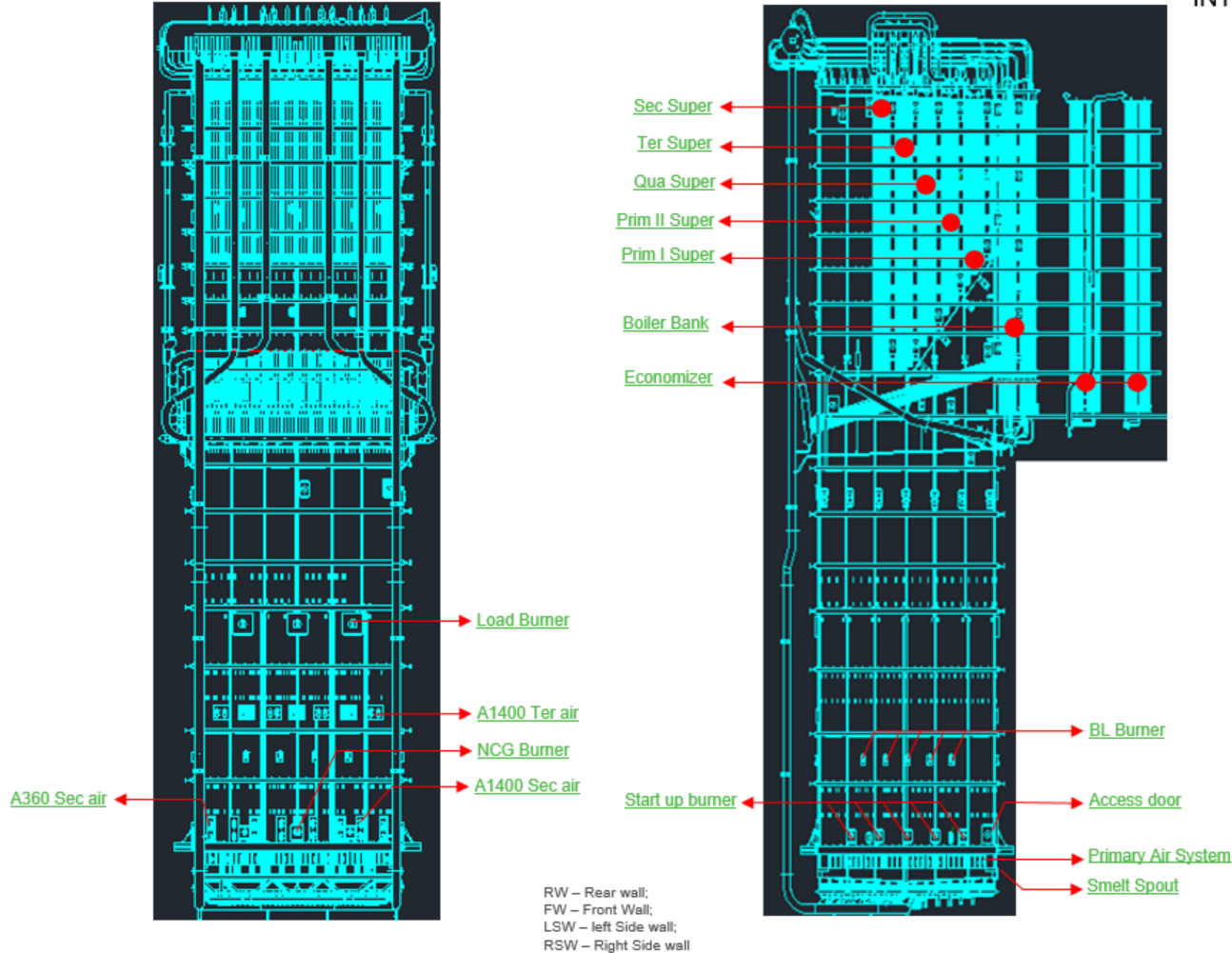
Shutdown Planning

Support Material - RBO

INTERNAL

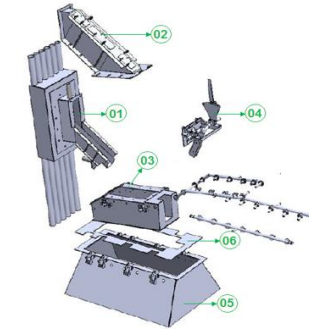


INTERNAL



Smelt Spout System

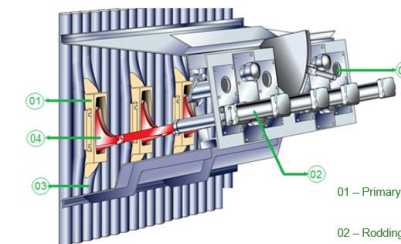
RW – 11 sets



- | | |
|----------------------|-----------------|
| 01 – Smelt Spout | – CUR1000563 |
| 02 – Upper Mini hood | – B15812-0013/1 |
| 03 – Lower Mini hood | – CUR1000564 |
| 04 – Shatter | – CUR1000565 |
| 05 – Casing (collar) | – CUR1001524 |
| 06 – Plate | – CUR3000477 |
| 07 – Washer nozzle | – CUR1001525 |

Primary Air System

RSW & LSW – 31 / FW & RW – 36 set

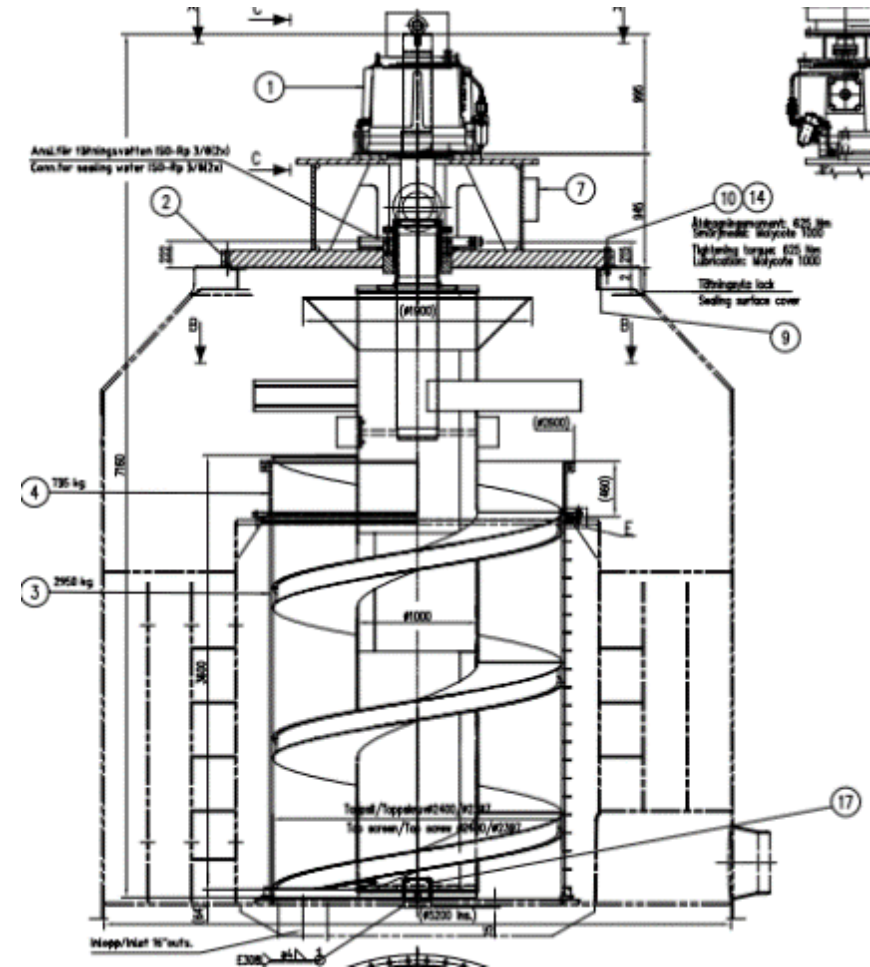
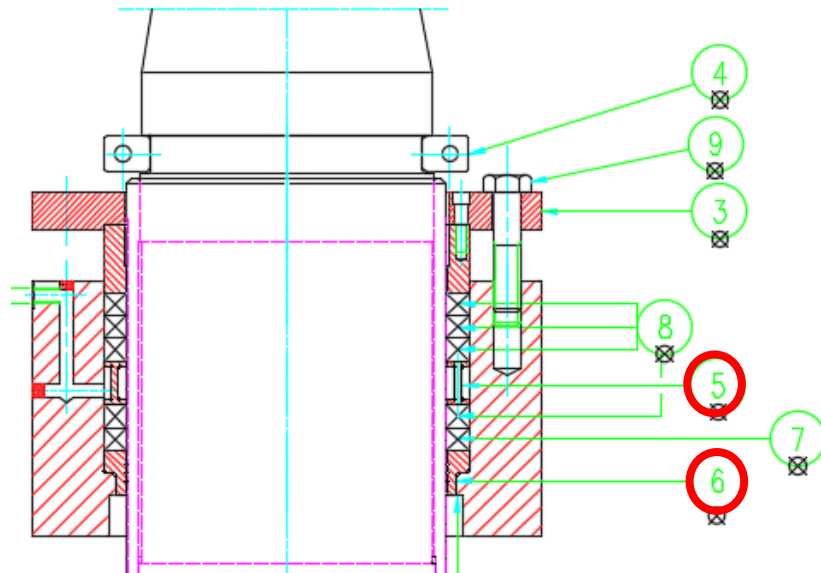


- | | | |
|--|--------------|--------------|
| 01 – Primary Air Nozzle A180 Extended | – POWP027948 | – POWP041983 |
| 02 – Rodding Master System | – POWP040093 | |
| 03 – Primary Air Opening (04 tubes Extend) | – CUR1000672 | |
| Primary Air Opening (04 tubes) | – CUR1000670 | |
| 04 – Primary air cutter | – POWP040096 | |
| 05 – Sight glass kit D84mm | – POWP040088 | |

Shutdown Planning

Support Material - COC

- Top Screw (22026123);
- Top Screen (22026120);
- Drive Assembly (50143102).
 - Pos.6 Bushing (50002788);
 - Pos.5 Sealing (50002786).



Shutdown Planning

Scenarios

Defined Maintenance Scope

Recommendation List Based on Scope

- Aligned with Service Scope
- High Accuracy
- Optimized Selection
- Accelerated Preparation
- Procurement Efficiency
- Cost Reduction
- Usage Predictability
- Streamlined Delivery & SDP Management



Efficient and Cost-Effective

Not Defined Maintenance Scope

Recommendation List based on Service Report

- Misaligned with Service Scope
- Low Accuracy
- Excessive and Unoptimized Selection
- Delayed Preparation
- Procurement Inefficiency
- Increased Acquisition Costs
- Unpredictable Usage
- Complex Delivery & SDP Management



Inefficient and Costly

Shutdown Planning

Delivery Follow-up

- The purchased spare parts are presented in a pie chart and sent periodically to the customer, along with a list of all purchased items, which can be filtered by:
 - Purchase Order
 - Sales Order
 - Technology
 - Customer
 - Spare Part Code (SAP)
 - Valmet Part Number
 - Status
 - Delivery Date



SHUTDOWN PLANNING - PG ORTIGUEIRA 2025 - FOLLOW UP



Item	ID Klabin	Pedido	Item PC	Texto Breve	Qte nd	Un	Data Remessa	OV Valmet	Linha OV	Codigo Item Valmet	TEC	Prev. Faturame	NF	Data NF	Status
1	791459	4504127445	10	ANEL V-RING VALMET VAL0022071	5	PC	01/04/2025	366777	10	VAL0022071	WOB	15/04/2025	109435	15/04/2025	Faturado
2	530571	4504121793	40	LIMPADOR 800,0 X 863,5 MM UNITIZADORA FA	2	PC	26/03/2025	848301	10	VAL0321009	BMM	17/04/2025	109529	17/04/2025	Faturado
39	528980	4504131827	10	ANEL PRENSA VALMET VAL0288650	8	PC	07/04/2025	366806	10	VAL0288650	WOB	15/08/2025			Material em estoque/ Aguardando faturamento
123	472664	4504168183	10	ANEL VED ROSCA POLIURETANO 73,20 MM 81,0	12	PC	26/05/2025	848562	10	VAL0138045	BMM	03/10/2025			Material em estoque/ Aguardando faturamento
138	937943	4504192552	30	ANEL O-RING FEP 20,00x3,00 SIL	2	PC	26/06/2025	848662	30	VAL0304856	WOB	06/10/2025			Material em fase de importação para o Brasil
151	143408	4504196865	30	REPARO ATUAD VALVULA CONTROLE BC12	2	JG	30/06/2025	2100406	30	250499	FLOW	20/08/2025			Material em fase de importação para o Brasil
157	536536	4504113107	10	PARAFUSO AJUSTE DEPURAD DC4 VALMET SDU00	3	PC	17/03/2025	848264	10	SDU0011869	PDU	03/10/2025			Material em fase de produção - Importado
180	823836	4504181345	50	VAL SOLENOIDE VALMET K03332	2	PC	01/07/2025	747599	50	K03332	AUT	01/09/2025			Material em fase de produção - Importado
188	200560	4504153298	10	CORDAO VEDAÇÃO CIRC BORRACHA-EPDM 5,70M	1	M	07/05/2025	367012	10	VAL0139812_00	WOB	18/08/2025			Material em fase de produção - Nacional
189	790913	4504180100	20	CORDAO VALMET VAL0169655	44	M	10/06/2025	848603	10	VAL0169655_00	BMM	01/10/2025			Material em fase de produção - Nacional

Shutdown Planning

Success Case: Actions before, during and after the Shutdown

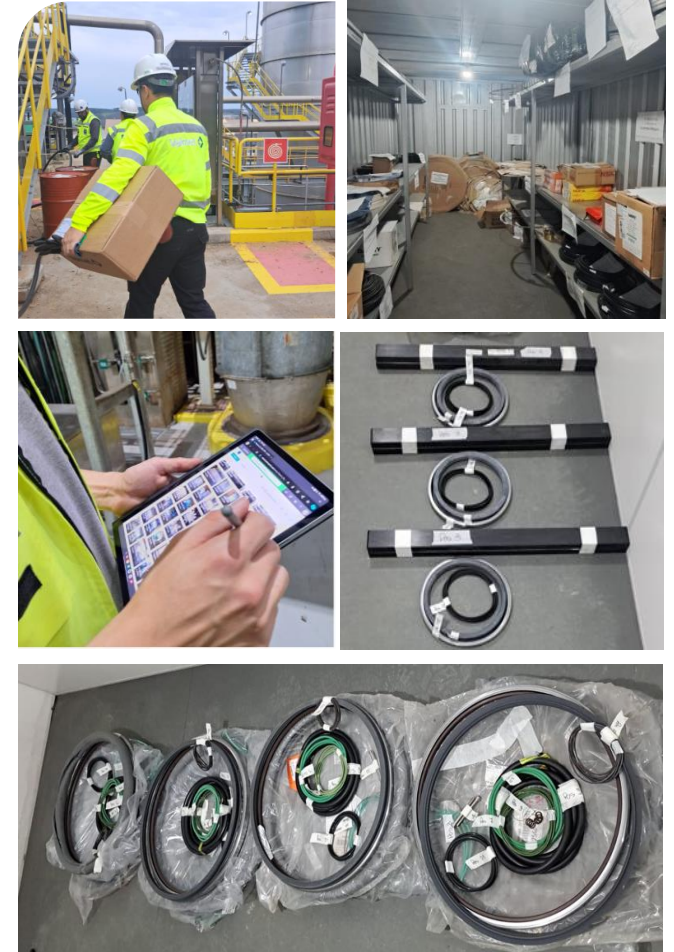
- Spare parts experts may visit the customer's site during the shutdown. The purpose of the visit is to:
 - Identify improvement opportunities;
 - Sales opportunities for the next shutdown;
 - Confirm if the parts have been correctly delivered, packed and identify any possible problem.
- He/she may also support the customer and Valmet personnel in any urgent spare part needs.
- Inputs during major shutdown:
 - Urgent spare part needs during shutdown;
 - Shutdown report, field service manager or project manager together with a spare parts person.



Shutdown Planning

Success Case: Actions before, during and after the Shutdown

- **Shutdown Preparation**
 - Begin 15 days prior to the scheduled shutdown, including item identification, sorting by area containers, mapping, and customer coordination.
- **New shutdown tool: item location**
 - Implement and utilize the newly developed tool
 - Item verification, integrating the Recommendation List and Delivery Follow-up processes.
- **Provide detailed item location information within containers**
 - Including photos, equipment details, and TAG numbers, while tracking accountability for part removal.
- **ePartsbook**
 - Ensure full utilization of ePartsbook throughout the shutdown to streamline and accelerate part identification. This initiative also promoted the Customer Portal, which generated significant customer interest during the event.
- **Immediate support**
 - Deliver responsive support for emergency demands and maintain effective customer interface throughout the process.





Shutdown Planning

Shutdown Planning Management

- Clock 12 months
- Clock 15 months
- Clock 18 months
- SA Field Services Reports

Valmet ID	Mill	Country	Line	Campaign (in months)	Start (Last Shutdown)	Duration (in days)	End (Last Shutdown)	Next Shutdown	Accomplished	01	02	03	04	05	06	07	08	09	10	11
225824	Celulosa Arauco y Constitucion - Nueva Aldea mill	CL		15	06/05/2023	10	06/15/2023	9/5/2024	100%	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
142000	Arauco Argentina - Puerto Esperanza	AR		12	08/07/2023	10	08/17/2023	11/7/2024	100%	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green
629425	Suzano - Tres Lagoas	BR		18	01/18/2025	7	01/25/2025	1/18/2025	85%	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red
190812	Suzano - Mucuri	BR	L1	18	02/08/2025	17	02/25/2025	2/8/2025	85%	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Yellow
629424	Suzano - Aracruz	BR	LC	18	04/04/2025	11	04/15/2025	4/4/2025	77%	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Yellow
196804	Bracell - Camaçari, Bahia	BR		15	05/05/2025	9	05/14/2025	5/5/2025	38%	Green	Green	Green	Green	Green	Red	Yellow	Yellow			
634101	LD Celulose - Indianópolis	BR		15	06/08/2025	9	06/17/2025	6/8/2025	46%	Green	Green	Green	Green	Green	Green	Yellow				
155010	Celulosa Arauco y Constitucion - Valdivia Mill	CL		15	03/03/2023	11	03/14/2023	7/1/2025	0%	Red	Red	Red	Red	Red	Red					
287009	CMPC Celulose Riograndense - Guaíba	BR	G2	12	09/01/2025	12	09/13/2025	9/1/2025	0%	Red	Red	Red	Yellow							
295343	Eldorado - Três Lagoas	BR		15	10/12/2025	10	10/22/2025	10/12/2025	0%		Yellow	Yellow								
352640	Klabin - Ortigueira	BR		15	11/03/2025	10	11/13/2025	11/3/2025	0%		Yellow	Yellow								
629424	Suzano - Aracruz	BR	LB	18	01/01/2026	9	01/10/2026	1/1/2026	23%	Green	Green	Green								
160055	Klabin - Monte Alegre	BR		15	01/12/2026	11	01/23/2026	1/12/2026	90%											
322490	Suzano - Limeira	BR		12	10/18/2025	10	10/28/2025	1/18/2026	0%											
111960	Bracell - Lençóis Paulista	BR		15	02/01/2026	9	02/10/2026	2/1/2026	0%											
287009	CMPC Celulose Riograndense - Guaíba	BR	G1	12	10/06/2025	12	10/18/2025	3/8/2026	100%											
142190	Cenibra - Belo Oriente	BR		15	03/09/2026	10	03/19/2026	3/9/2026	0%											
629424	Suzano - Aracruz	BR	LA	18	03/09/2026	9	03/18/2026	3/9/2026	0%											
297777	Suzano - Imperatriz	BR		18	04/08/2026	11	04/19/2026	4/8/2026	90%											
190811	Suzano - Suzano	BR		18	05/11/2026	9	05/20/2026	5/10/2026	100%											
190812	Suzano - Mucuri	BR	L2	18	06/05/2026	11	06/16/2026	6/5/2026	0%											
629423	Suzano - Jacarei	BR		18	07/19/2026	10	07/29/2026	7/19/2026	0%											

Legend

01) Shutdown Report 02) Visit scheduling 03) Material and visit preparation 04) 1st shutdown planning meeting 05) Recommendation material	06) Quotation 07) Delivery Follow-up 08) Check additional demand 09) 2nd shutdown planning meeting 10) Quotation additional demand 11) Items delivery conclusion
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	Concluded	Not concluded
Past	Green	Red
Present	Green	Yellow
Future	No color	No color



Shutdown Planning

Results Monitoring: Customer, Customer Mill, Mill Line, Technology and Period visibility

Year

- 2022
- 2023
- 2024

Customer/Site

- CENIBRA
- CMPC
- Klabin
- LD
- Suzano
 - Aracruz
 - Imperatriz

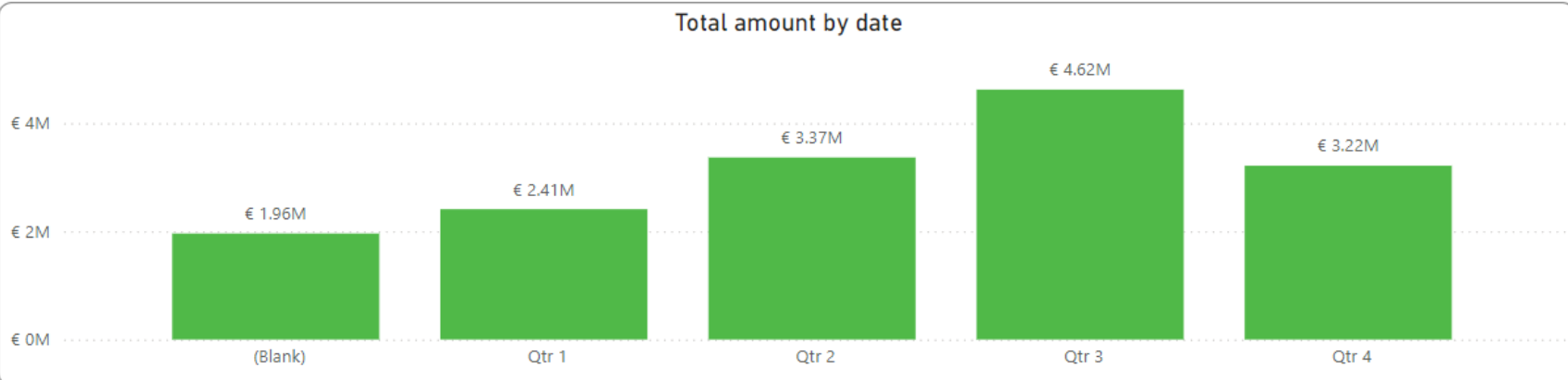
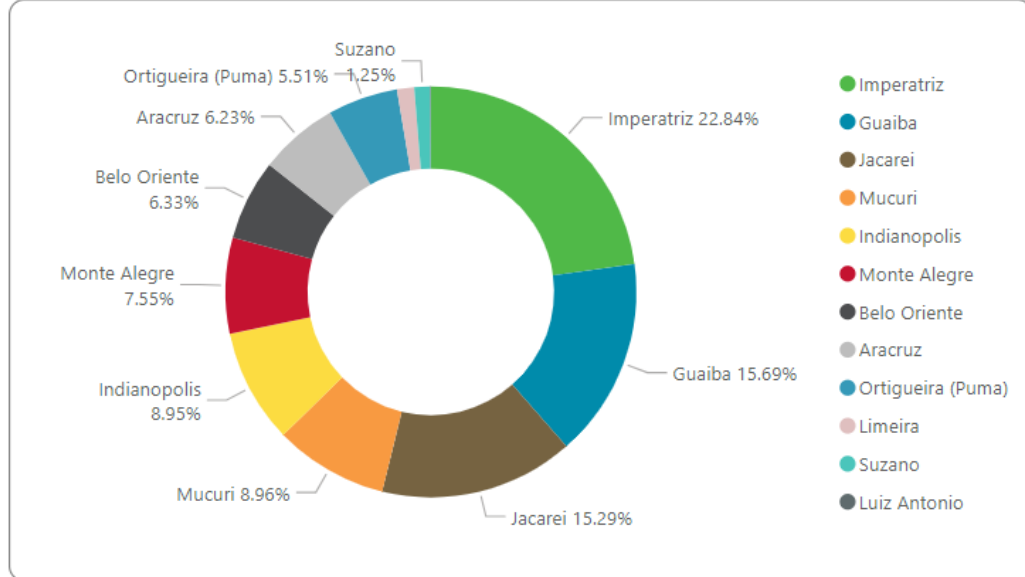
Technology

- BAL
- BMM
- CLC
- COC
- FDS
- PDU
- PMM
- RBO
- RCA
- SCP
- WHL

Line

- G1
- G2
- Geral
- L1
- L2
- LA
- LB

Unidade	Total Amount BRL	Total Amount EUR
Aracruz	R\$ 5,224,808.05	€ 970,072.05
Belo Oriente	R\$ 5,309,375.80	€ 985,773.45
Guaiba	R\$ 13,159,030.73	€ 2,443,191.74
Imperatriz	R\$ 19,151,569.11	€ 3,555,805.63
Indianopolis	R\$ 7,507,737.63	€ 1,393,935.69
Jacarei	R\$ 12,824,342.24	€ 2,381,051.29
Limeira	R\$ 1,136,139.96	€ 210,943.18
Luiz Antonio	R\$ 39,748.15	€ 7,379.90
Monte Alegre	R\$ 6,328,595.96	€ 1,175,008.53
Mucuri	R\$ 7,514,152.10	€ 1,395,126.64
Ortigueira (Puma)	R\$ 4,624,619.72	€ 858,637.16
Suzano	R\$ 1,047,545.35	€ 194,494.12
Total	R\$ 83,867,664.80	€ 15,571,419.38

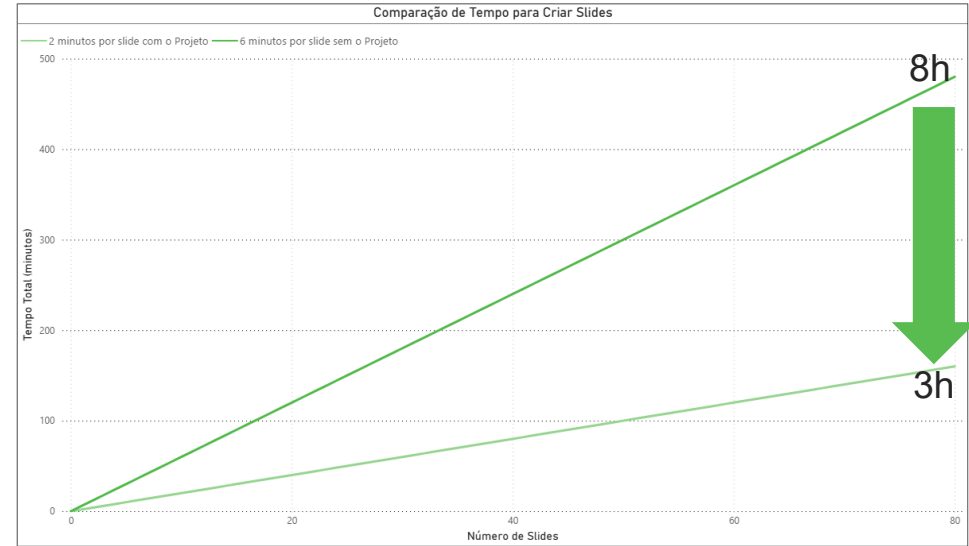




Shutdown Planning

Shutdown Planning Vision

- Recommendation lists support material preparation automatization.
- Using similar equipment assembly drawings, the tool prepares the recommendation list presentations in a few clicks.
- Possibility to prepare more recommendation lists (active sales) to boost up the business.



66% time reduction using the new tool

2024

CLIENTES	WOB	WHL	RBO	PDU	PM	LKI	COC	EVA	BM	BFB	BCTMP	BAL	LISTAS REALIZADAS
Suzano	█												5
LD Celulose													0
Klabin	█												1
CMPC													0
Cenibra	█												1
Bracell													0
Arauco													0
Total													7

Status	Cor
Realizadas	█
Não realizadas	

Divisão de Linhas em uma Fábrica

- WOB - Lavagem de Polpa Marron
- WHL - Preparo de Madeira
- RBO - Caldeira de Recuperação
- PDU - Secagem de Polpa
- PM - Máquina de Papel
- LKI - Forno de Lama
- COC - Cozimento
- EVA - Evaporação
- BM - Máquina de Papel
- BFB - Caldeira de Força
- BCTMP - Polpa Químico-Termomecânica Branqueada
- BAL - Enfardamento

2025

CLIENTES	WOB	WHL	RBO	PDU	PM	LKI	COC	EVA	BM	BFB	BCTMP	BAL	LISTAS REALIZADAS
Suzano	█					█							7
LD Celulose	█	█		█		█		█				█	1
Klabin	█			█		█	█		█			█	2
CMPC				█		█	█				█	█	2
Cenibra	█						█						1
Bracell	█												2
Arauco	█		█				█					█	1
Total													16

Status	Cor
Realizadas	█
Não realizadas	

Divisão de Linhas em uma Fábrica

- WOB - Lavagem de Polpa Marron
- WHL - Preparo de Madeira
- RBO - Caldeira de Recuperação
- PDU - Secagem de Polpa
- PM - Máquina de Papel
- LKI - Forno de Lama
- COC - Cozimento
- EVA - Evaporação
- BM - Máquina de Papel
- BFB - Caldeira de Força
- BCTMP - Polpa Químico-Termomecânica Branqueada
- BAL - Enfardamento

Shutdown Planning

Further Information

- Flow articles:
 - [PER shutdown planning: learn more about this program in Brazil and the benefits for our customers](#)
 - [Shutdown Planning: saiba mais sobre o programa e os benefícios para os nossos clientes](#)
 - [SA: Valmet concludes successful shutdown at Klabin Ortigueira, in Brazil](#)
 - [Oferta completa de serviços na Parada Geral da Suzano Imperatriz \(MA\)](#)
- Solution Finder

