



Production Management system

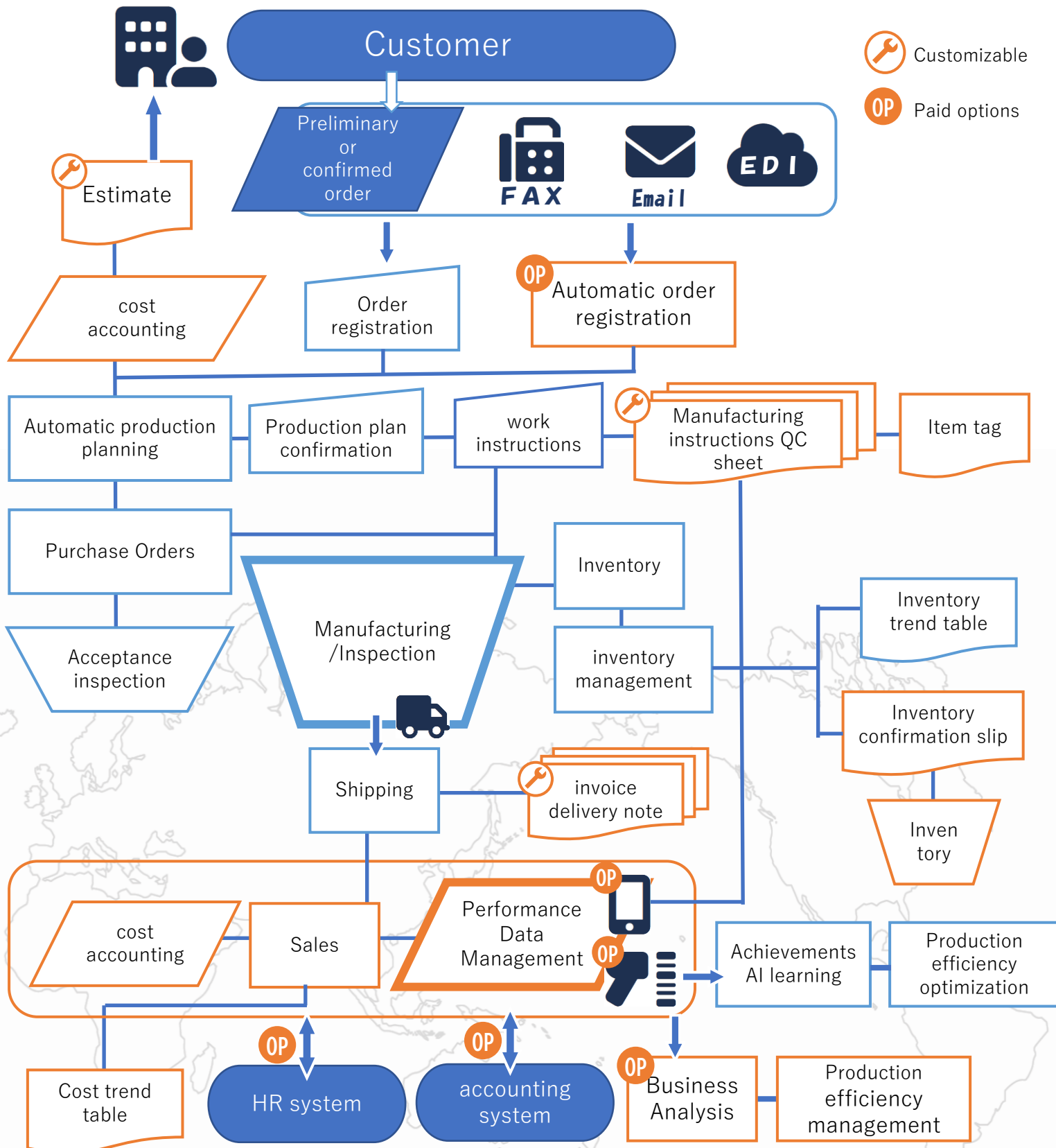
gb-ERP

greemin-bigwell Co.,Ltd.

Table of contents

gb-ERP Workflow Diagram	3
List of Key Features	4
Screenshots of Key Features	5
List of Output Reports	9
Sample Reports	10
Operation Flow (On-site Staff / Production Manager)	11
Operation Flow (Executive / Management)	13
Master Data Information	14

gb-ERP Workflow Diagram



List of Key Features

1. Order/Purchase Order/Shipping Management
2. Equipment/Personnel Operation Status Management
3. Lot Management
4. Production Planning
5. Performance Management
6. Inventory Management
7. Drawing Number Management
8. Master Data Management
9. Cost Management (v2)
10. Various Report Output (v2)
11. Business Analysis (v2/OP)
12. Interconnection with Other Systems (v2/OP)
13. Multilingual Support (v2/OP)
14. Barcode Issuance for Invoices (v2/OP)

Screenshots of Key Features(Order)

- You can register orders by selecting Confirm Order/Unofficial Order.
- You can issue quotes from the order management screen (you can also customize the report layout).

▼ Order List

受注リスト

キーワード

区分 ☐ 受注 ☐ 内示

Show

顧客	受注番号	受注日		
取引先5	NO-2	2021-05-11	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先11	NO-3	2021-05-31	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先7	NO-9	2021-06-06	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先134	NO-4	2021-08-11	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先134	NO-5	2021-08-11	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先135	NO-6	2021-08-16	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先135	NO-8	2021-08-16	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先1	NO-10	2022-04-15	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先4	NO-16	2022-04-18	<input type="button" value="編集"/>	<input type="button" value="コピー"/>
取引先4	NO-14	2022-04-18	<input type="button" value="編集"/>	<input type="button" value="コピー"/>

< 1 2 3 >

▼ Order registration

受注基本情報

受注タイプ

受注番号

受注日 2021/05/31

顧客 取引先11

納品先の拠点 拠点16

納品書宛先の拠点 拠点16

受注総額 13172000

品番検索

キーワード

区分 ☐ 加工 ☐ 製造 ☐ 製造販売

品名	製造区分	生産区分	図番	
部品34	製造	量産	None	<input type="button" value="追加"/>
部品37	製造	量産	F2(ver.1)	<input type="button" value="追加"/>
部品44	製造	量産	F3(ver.1)	<input type="button" value="追加"/>
部品51	製造	量産	F4(ver.1)	<input type="button" value="追加"/>
製品63	製造	量産	None	<input type="button" value="追加"/>

<< 1 2 3 4 >>

詳細部

製品名	Ver	出荷ロット	出荷予定日	納期	数量	小計	
製品1514	1		2023/01/09	2023/01/09	50	1562500	<input type="button" value="削除"/>
製品1514	1		2023/01/09	2023/01/09	50	1562500	<input type="button" value="削除"/>

*The screen is under development and may differ from the actual specifications.

Screenshots of Key Features(production planning)

- Create production plans that match operating conditions. By accumulating performance data, you can calculate plans with higher production efficiency.
- Leaving some leeway between processes allows you to handle rush orders. The amount of leeway can be freely set.

▼ Production planning screen

*The screen is under development and may differ from the actual specifications.

スケジュールFix	親ロット番号	品名	製造数量	引当数量
Fix	temporal-4	部品135	40	
スケジュールFix	子ロット番号	工順	工程名	製造数量 使用リソース
	210603-7629	1	部品68	40(40)
Fix	temporal-25	2	工程131	40(40) M-93(model-93),作業者73
	210531-130	3	購入品130	40(40)
	210531-6	3	購入品6	40(40)
Fix	temporal-28	3	工程132	40(40) M-143(model-143),作業者73
Fix	temporal-29	4	工程133	40(40) 作業者68
Fix	temporal-30	5	工程134	40(40) 作業者68
				開始期限/終了予定
				2021年12月3日 12時59分 ～ 2021年12月3日 12時59分
				2023-05-13 08:43 2023-05-13 08:52
				2021年11月30日 18時36分 ～ 2021年11月30日 18時36分
				2021年11月30日 18時36分 ～ 2021年11月30日 18時36分
				2023-05-16 08:26 2023-05-16 08:31
				2023-05-18 13:01 2023-05-18 13:45
				2023-05-20 15:04 2023-05-20 15:13

- Propose inventory allocation for in-stock parts
- Propose combinations of machines and people with high production efficiency based on past performance
- Allocate personnel with consideration for overtime

Considering materials, people, and machines

- Propose a work schedule that takes into account operating status and lead times

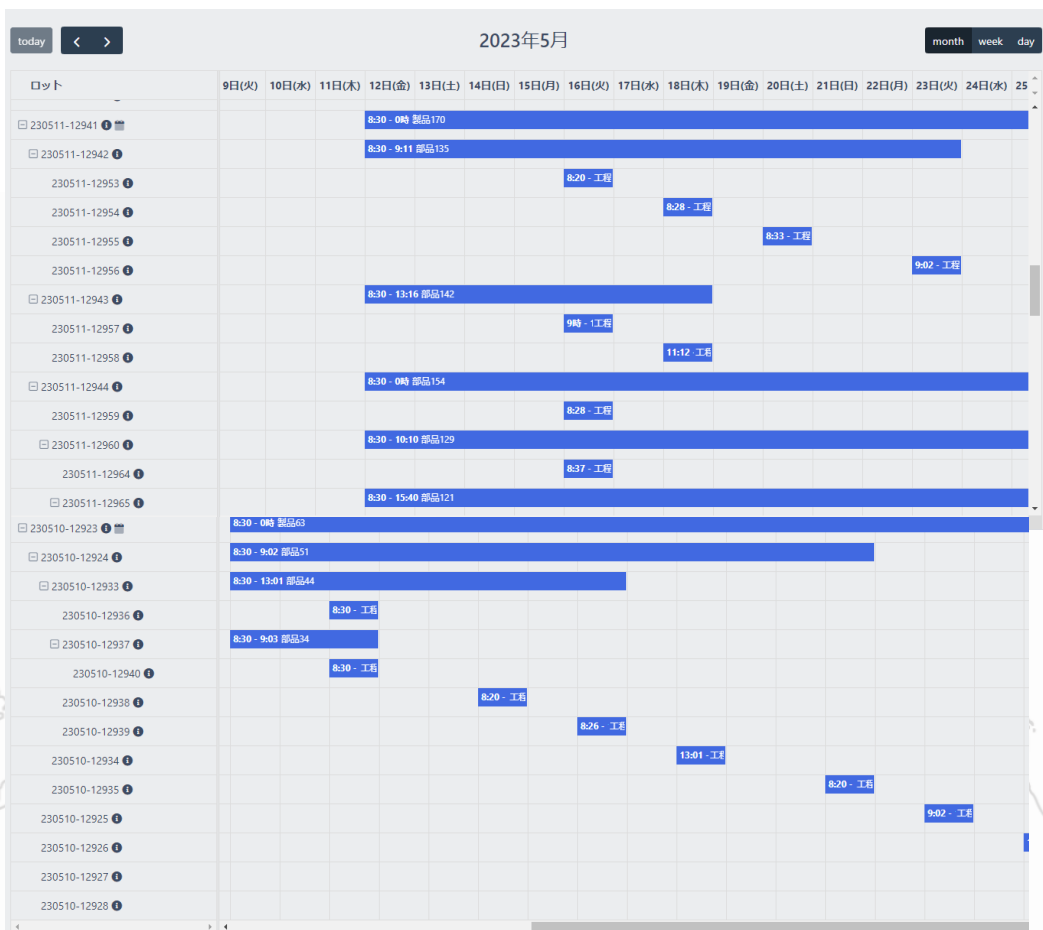
Super-fast scheduler

Screenshots of Key Features(Lot)

- Manage schedules down to the smallest detail, including parent, child, and grandchild lots.
- By dividing lots into smaller parts, you can trace down to the smallest detail.
- Toggle the display with a "+/-" key.
- You can also search for delivery dates and product names.

▼ Lot List

*The screen is under development and may differ from the actual specifications.



Lot Serch ➡

ロット状況検索

ロット

品名

納期 (From/To)

年 / 月 / 日

年 / 月 / 日

検索

Screenshots of Key Features(Cost)

- When making a quote, you can set the product, quantity, unit price, and delivery date to simulate the cost and profit margin. By checking these figures, you can consider the price and quantity that matches the profit margin during negotiations.
- Using a list of past transactions, you can compare the actual costs against the costs set at the time of the quote. Analyzing the variance in incurred costs can help improve management.

▼ Estimate Simulation

見積シミュレーション

製品名 Ver 出荷ロット 出荷予定日 納期 単価 税区分 数量 小計 原価 原価率

製品711 1 20 2023/08/04 2023/08/07 525.5 (税) 10 200 105,100 413.0 78.6 %

スケジュール基本条件

プロセス開始日時 2023-05-16 08:30

ヒフクター 4.0

スケジュール確認 20%セッ

スケジュール Fix	子ロット 番号	工程	工程名	製造数 量	使用リソース	開始時間/終了予定
210617-10859	1	購入品8991	650(50)		2021年12月17日 14時26分 ~ 2021年12月17日 14時26分	
Fix	temporal-2	2	工程4097	13(13)	M-1(model-1)作業費43	2023-05-20 08:30 2023-05-20 22:48

製品43 1 20 2023/08/04 2023/08/07 6,300 (税) 10 15 94,500 4,863.6 77.2 %

ロットスケジュール

小計	税	合計	売上総利益	利益率
199,600	19,960	219,560	64,006	29.15

内容修正
この内容でロット発注

Past Transaction List▶

取引一覧

キーワード

区分 ☐ 受注 ☐ 内示

Show 40 検索

顧客	受注番号	受注日	予算原価率	実際原価率	利益率
取引先5	NO-2	2021-05-11	4.11 %	3.32 %	40.65 %
取引先11	NO-3	2021-05-31	7.33 %	3.46 %	73.77 %
取引先7	NO-9	2021-06-06	6.03 %	7.13 %	39.36 %
取引先134	NO-4	2021-08-11	2.56 %	7.53 %	75.12 %
取引先134	NO-5	2021-08-11	5.74 %	3.19 %	74.72 %
取引先135	NO-6	2021-08-16	2.35 %	7.68 %	68.12 %
取引先135	NO-8	2021-08-16	4.07 %	4.71 %	71.70 %
取引先1	NO-10	2022-04-15	4.00 %	2.37 %	42.86 %
取引先8	NO-13	2022-04-18	7.79 %	6.15 %	65.02 %
取引先4	NO-14	2022-04-18	3.10 %	2.41 %	51.13 %
取引先4	NO-16	2022-04-18	5.22 %	5.48 %	58.09 %
取引先5	NO-12	2022-04-18	7.96 %	6.33 %	71.61 %
取引先135	NO-18	2022-06-07	5.28 %	0.38 %	63.46 %
取引先135	NO-28	2022-06-07	2.68 %	1.76 %	54.14 %
取引先135	NO-17	2022-06-10	3.66 %	3.81 %	56.93 %
取引先1	NO-21	2022-07-28	5.37 %	6.31 %	61.87 %
取引先1	NO-22	2022-07-28	6.04 %	0.11 %	46.55 %
取引先7	NO-27	2022-07-28	6.52 %	0.73 %	52.89 %
取引先4	20220926	2022-09-26	5.63 %	1.13 %	65.38 %
取引先4	20220927	2022-09-27	4.50 %	3.65 %	66.20 %
取引先4	20220927	2022-09-27	2.86 %	3.62 %	46.99 %
取引先10	202305010	2023-05-09	2.56 %	7.92 %	66.31 %

*The screen is under development and may differ from the actual specifications.

List of Output Reports

	Output form	Screen check (csv output)
Ordering/acceptance management	purchase order	Order list
Order management	Estimate	Order list
inventory management	Inventory inventory confirmation slip	Inventory schedule / Parts inventory inquiry / Monthly inventory inquiry / Inventory adjustment list / Monthly product inventory list by customer / Customer supply inventory list / Long-term slow-moving inventory list
Shipping management	Delivery note/invoice	Shipping schedule/Shipping list/Annual shipping results by product
Job management	Work instructions/QC sheets/ Work performance report/item slip	Lot list
cost management		Sales list / Monthly sales list / Standard cost list / Sales table by customer (monthly) / Purchase list by supplier / Processing list by subcontractor / Annual shipping performance table by product

1. Operation Flow (On-site Staff / Production Manager)

From sales orders to work instructions

受注基本情報

受注タイプ: 受注

受注番号:

受注日: 2023/05/09

顧客:

納品先の拠点:

納品書宛先の拠点:

受注総額:

品番検索

キーワード:

区分:

検索

基本情報

顧客	
受注番号	
社内ロット番号	210610-9545
出荷ロット番号	
SMRC・レーザーマーキング番号	None
図番	
サイズ	
品名	部品86
品番	NC-106
材料	購入品84 購入品83 購入品82
熱処理硬度	
製造指示数	100

工程

工程	社内ロット番号	工程	図番・作業指示書	構成分類	製造指示数(引当数)	開始(予定)	終了(予定)	リソース(予定)	開始(実績)	終了(実績)	リソース(実績)	良品数	不良数
1	210531-84	購入品84		購入品	(100)	11/30 18:36	11/30 18:36		11/30 18:36	11/30 18:36			
1	210531-83	購入品83		購入品	(100)	11/30 18:36	11/30 18:36		11/30 18:36	11/30 18:36			
1	210531-82	購入品82		購入品	(100)	11/30 18:36	11/30 18:36		11/30 18:36	11/30 18:36			
2	210610-9547	工程85		工程	100	12/14 09:00	12/14 10:50	ユーザ44					

*The screen is under development and may differ from the actual specifications.

① Order registration

Register the order information in the system. (Optional: automatic registration)

② Production planning

The production schedule is automatically generated based on the order information and lot status.

By considering the 3M factors (Man, Machine, Material) during allocation, a higher-quality production plan is created.

③ Work instructions

Work instructions are issued.

Production data is also linked to allocated inventory items, allowing for easy traceability in the event of a defect and contributing to improved quality.

④ Manufacturing/Inspection

Manufacturing is carried out according to the work instructions.

The inspection and acceptance process is also included in the work instructions.

From Production Results to Shipping

お名前	購入品	数量	2023/11/30	2023/11/30	2023/11	0.36	2023/11/30 18:36
931-2	購入品	品	2023/11/17	2023/11/30	2023/11	0.36	2023/11/30 18:36
お名前	購入品	数量	2023/11/30	2023/11/30	2023/11	0.36	2023/11/30 18:36
931-3	王冠16	王冠	2023/6/26	2023/6/23	ユーザー-61	0.36	2023/11/30 18:36

Field workers perform steps ④ and ⑤ daily according to the assigned work instructions.

作業追加

作業区分

内段取り

内段取り

製造

作業君/マシン

開始

終了

ユーザー 51/M-88

(予定)

2023/5/13 08:30

2023/5/13 08:43

(実績)

2023/05/11 16:12

2023/05/11 16:12

製造数(良)

製造数(不良)

0

0

使用部材(ミルシート番号)	使用数/1個当たり	使用数	未使用廃棄数
部品37(--)	1	0	0
購入品38(--)	1	0	0
購入品38(--)	1	0	0
購入品40(--)	1	0	0
購入品40(--)	1	0	0

Close

入力完了

The collected data is used to improve the accuracy of future production planning and to support management planning. (Barcode output is an optional feature.)

Based on the order data, items are automatically added to the shipping list. Shipping operations are carried out according to the shipping schedule.

By performing periodic inventory counts and aligning the physical stock with the registered quantities, more accurate numbers can be used during allocation and related processes.

Operation Flow (Executive / Management)

Cost Management

*The screen is under development and may differ from the actual specifications.

Manufacturing Cost
(Direct Manufacturing Cost)

Material Cost (e.g.,
purchased components)

Labor Cost (wages for
workers)

Overhead Cost (e.g.,
machine depreciation
expenses)

Gross Profit = Sales - (Cost × Quantity)

Gross Profit Margin (%) = Gross Profit ÷ Sales × 100

① Master Registration

Register the product structure information, unit prices for purchased items, worker wages, machine depreciation costs, and other related data. Based on this information, the direct manufacturing cost is calculated.

② Cost Estimation

By setting the quantity and unit price for a product, the cost and profit margin can be calculated. (This functions as a cost estimation simulation.)

You can use the optimal production volume and pricing—derived from the profit margin—as negotiation materials.

A quotation can be generated directly, and an order (or preliminary order) can be registered.

③ Cost (List / Trends)

The variance between actual and planned profit margins can be displayed in a list by product or by transaction.

Master Data Information

- **Product Information**

- ↳ Products / Purchased Items / Outsourced Processing / Processes

- **Business Partners**

- ↳ Customers / Suppliers

- **Resources**

- ↳ Personnel / Machines / Personnel Groups

- **Inventory**

- ↳ Planned Production / Planned Usage / Physical Stock /
Pending Inspection

- **Lots**

- ↳ Quotation / Pending Lot Number Issuance / In Production /
Pending Shipment / Shipped / Delivered

- **Others**

- ↳ User Permissions / Calendar

The above items are examples of master data.

Through comprehensive traceability in gb-ERP,

you can easily track *“who produced it, when it was made, and with which materials.”*

By collecting a wide range of additional data, the system continues to evolve into a more accurate and advanced production management platform.

Furthermore, since all input logs are stored, even if an issue or data corruption occurs, recovery is possible.