TARGET AND PROGRAM

WASTE MANAGEMENT

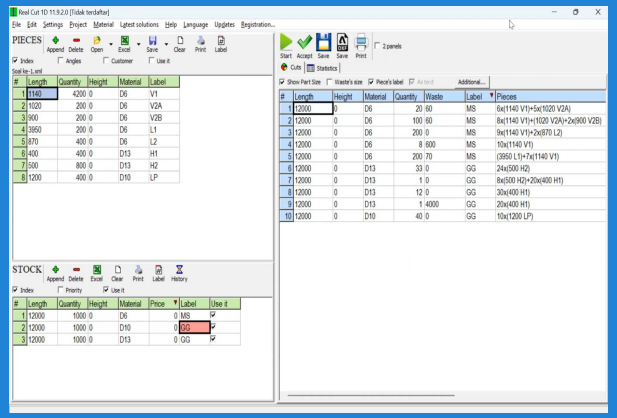
PT Wijaya Karya Beton Tbk

ESG

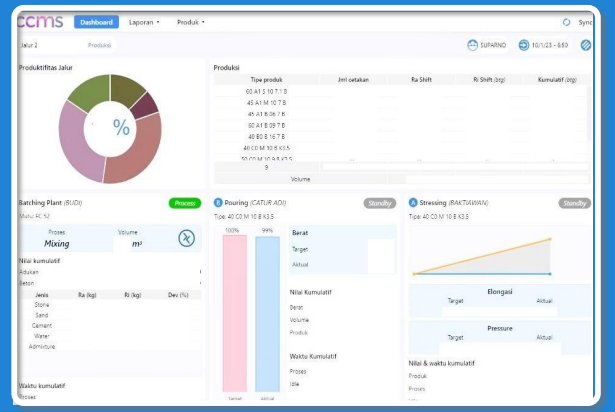
WASTE EFFICIENCY

WIKA Beton implements a structured Waste Management Program with a clear target to minimize waste generation and support the transition toward **zero waste operations** across its manufacturing activities. The program integrates process optimization, digital technologies, and responsible waste treatment to **reduce material losses, improve resource efficiency, and strengthen environmental performance.**

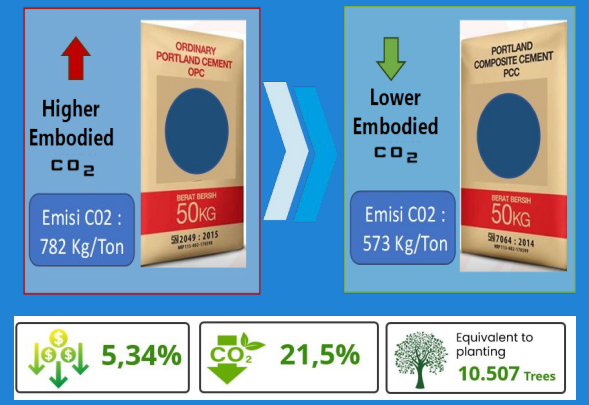
Non-Waste Material Program



Optimization Of Rebar Cutting Length



Computer Control Machining System



Environmentally Friendly Material

WASTE EFFICIENCY

NON – WASTE PROGRAM

1. Non-Waste Material Program

Liquid waste originating **from cement water** after the concrete compaction process will form waste sediment (sludge) in the WWTP (Wastewater Treatment Plant) tank.

Estimated waste sediment (sludge) in 2021

11.937 m^3/year

ZERO SLUDGE WASTE

WASTE EFFICIENCY

OPTIMIZATION OF REBAR CUTTING LENGTH

Real Cut 1D is a software application designed to **optimize rebar cutting schedules by minimizing material waste** and calculating the most **efficient cutting lengths** for precast concrete fabrication

BEFORE

- Rebar cutting (12 m) did not necessarily produce optimal results and often created **waste**.
- Determining rebar cuts was **difficult** as it was still done **manually/conventionally**.
- **Rebar cut-off leftovers** were **not automatically recorded**, making them potentially **unusable**

AFTER

Rebar cutting (12 m) is now based on **software analysis** results, done **quickly**, to produce **optimal cuts**. The remaining rebar cuts are **monitored as stock**, making them **usable** for future production.

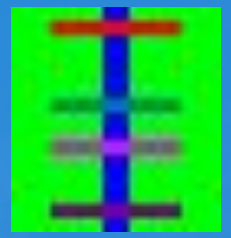
Output

Rebar Volume Optimization

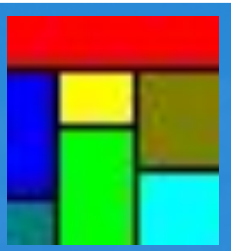
Before		Target		After	
Rebar Volume Efficiency	Sept 2023 1,74%	Rebar Volume Efficiency	Des 2024 2,50%	Rebar Volume Efficiency	Sept 2025 2,64%

Solution And Trust

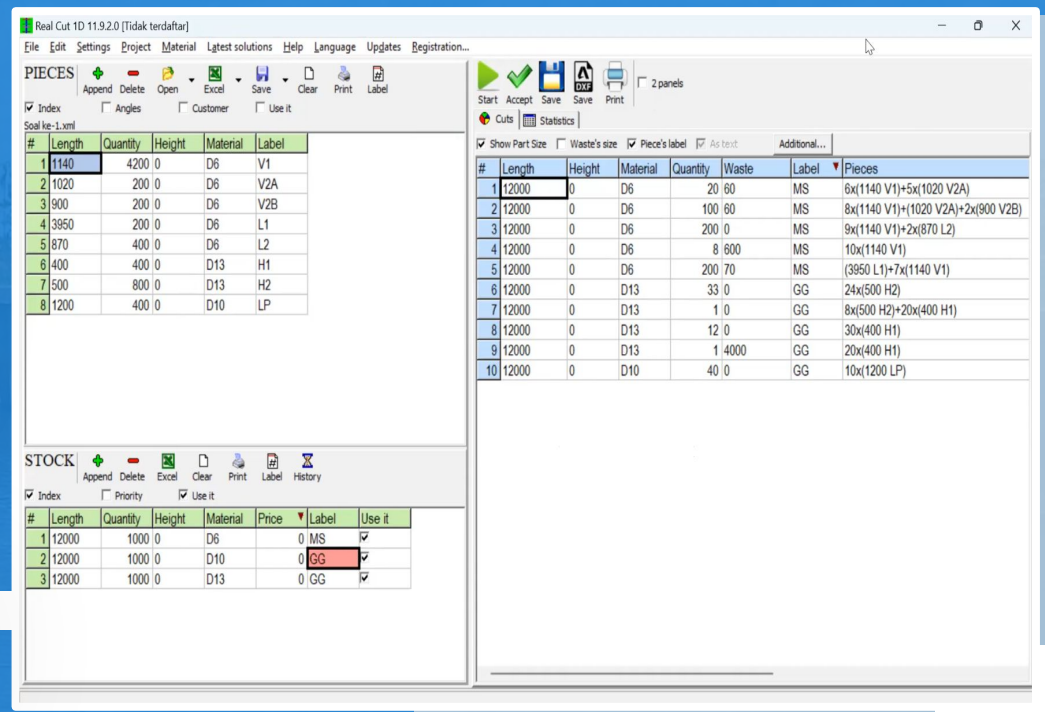
OPTIMIZATION FOR REBAR



Real Cut 1D



Cutting Optimizer



WASTE EFFICIENCY

Danantara Indonesia

WIKA BETON

COMPUTER CONTROL MACHINING SYSTEM

Computer Control Machining System (CCMS) is a **computer-based equipment control mechanism that enables integration through (real time monitoring, early warning system, big data dan waste efficiency)** each other between automatic batch, automatic concrete pouring, automatic stressing control and automatic concrete spinning.

BENEFITS

Realtime Monitoring

Production monitoring dashboard for each line can be accessed in real-time anytime and anywhere.

Early Warning System

Indication of production process deviations and ease of identifying the cause of deviations.

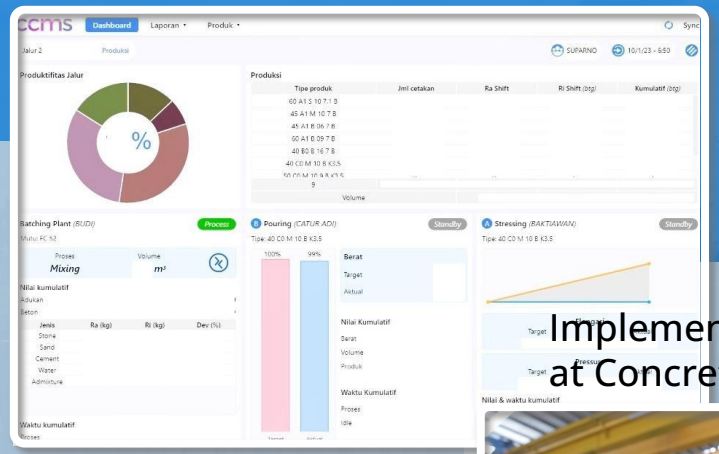
Big Data

Detailed production records are stored in the database and can be used as a basis for improvements and development.

Waste Efficiency

The use of sensors and computer-operated systems can minimize deviations during the production process.

Dashboard CCMS



Implementation CCMS at Concrete Factory

WASTE EFFICIENCY

ENVIRONMENTALLY FRIENDLY MATERIAL

Utilization of PCC and Fly Ash

Description	PCC & Fly Ash Target (%)	Usage of Cementitious Material (Ton)						
		Total	OPC		PCC	Fly Ash	PCC + Fly Ash	
PPB Sumatera Utara	45%	17.324	6.748	39,0%	10.556	21	10.577	61,0%
PPB Lampung	75%	13.676	11.571	84,6%	2.105	-	2.105	15,4%
PPB Bogor	75%	29.555	7.616	25,8%	18.907	3.032	21.939	74,3%
PPB Majalengka	90%	15.127		0%	14.131	996	15.127	100%
PPB Pasuruan	75%	33.194	5.577	16,8%	25.918	1.699	27.617	83,2%
PPB Sulawesi Selatan	40%	15.429	9.565	62,0%	5.844	21	5.865	38,0%
PPB Subang	35%	24.906	18.725	75,2%	4.513	1.668	6.181	24,8%
PPB Lampung Selatan	75%	17.553	6.796	38,7%	10.757	-	10.757	61,3%
TOTAL PPB	**65%**	**166.764**	**66.597**	**39,9%**	**92.730**	**7.436**	**100.166**	**60,1%**

WIKA Beton is committed to minimizing waste through quantifiable targets and product innovation. We actively support industrial recycling by establishing a corporate target of 65% utilization for PCC and Fly Ash (a non hazardous waste from coal-fired power plants) across our production lines. Additionally, our waste-to-product initiative converts residue into 20 tons of paving blocks, reducing waste generation by 30 kg per month.

WASTE EFFICIENCY

Hazardous and Non Hazardous Waste Management

Program and Reference

No.	Category	Type of Waste	Activity	Description	Objective	Standard Reference
1	Waste Reduction	Hazardous Waste	Construction of a B3 Waste Disposal Site	Waste storage facilities according to PP 22/2021	Ministry of Environment and Forestry compliance & logistics efficiency	PP No. 22 Tahun 2021 Pasal 223
2	Waste Reduction	Non Hazardous Waste	Solid waste shredder machine	Plastic & wood waste processing	Reduction of waste volume	Permen LHK No. P75/2019 (Pengelolaan Limbah Non-B3)

Thank You

For further information,

please visit Our Official Website :

SCAN ME