

Production planning and resource allocation

Automates production planning and resource allocation by analyzing geological data, equipment capacity, and market demands to optimize mining schedules and equipment deployment. Reduces planning time by 60% while maximizing resource extraction efficiency.

Download PDF

Get Your Blueprint

WORKFLOW TRIGGER



Monthly production planning cycle begins or significant geological survey update received

Visual Flow

Each node represents an automated step. Connections show how data and decisions move through the workflow.

STEP 1 - TRIGGER
 Initiate Production Planning



+
-
☐

Step-by-Step Breakdown

Detailed explanation of each automated stage in the workflow.

1

⚡ TRIGGER

Initiate Production Planning Cycle

Workflow triggers automatically on the first day of each month or when new geological survey data becomes available. System begins collecting current operational data and market requirements.

MineSight

Surpac

2

 ACTION

Analyze Geological Resource Data

Processes geological surveys, ore grade distributions, and reserve estimates to determine optimal extraction zones. Updates 3D geological models with latest survey data.

Surpac

Vulcan

3

 ACTION

Assess Equipment Capacity Status

Reviews current equipment availability, maintenance schedules, and operational capacity across all mining equipment. Calculates realistic production capabilities based on equipment status.

Deswik

XPAC

4

 DECISION

Evaluate Production Feasibility

Compares production targets against available resources, equipment capacity, and geological constraints. Determines if current targets are achievable or require adjustment.

Whittle

MineSight

5

Optimize Mining Sequence Schedule

Generates optimized extraction sequences and equipment allocation schedules to maximize ore recovery while minimizing operational costs. Creates detailed weekly and daily production schedules.

Whittle

Deswik

6

ACTION

Allocate Resources and Equipment

Assigns specific equipment, personnel, and support resources to designated mining areas based on optimized schedules. Updates resource allocation databases and notifies operational teams.

XPAC

Deswik

7

OUTPUT

Generate Production Plan Reports

Creates comprehensive production planning reports including mining schedules, resource allocation matrices, and performance targets. Distributes plans to operations, maintenance, and management teams.

MineSight

Vulcan



Outputs

- Optimized monthly production schedule
- Equipment and resource allocation matrix
- Mining sequence optimization report
- Daily operational task assignments



Key Metrics

- Production target achievement rate
- Equipment utilization efficiency
- Resource allocation accuracy
- Schedule adherence percentage



Tools & Integrations

- MineSight
- Surpac
- Vulcan
- Deswik
- XPAC
- Whittle

AI Business OS

Actionable AI implementation strategies for business leaders ready to transform their operations.

COMPANY

[About](#)

[Industries](#)

CONNECT

[MVP.dev](#)

[LinkedIn](#)

RESOURCES

[Articles](#)

