O_M_T-Cap: Machine capacity per period.

$$
\begin{array}{ccc}
C_{11} & & C_{1T} \\
. & \quad \cdots \quad & . \\
. & & . \\
. & \quad \cdots \quad & . \\
C_{M1} & & C_{MT}
\end{array}
$$

O_M_T-Cost: setup cost, production cost and inventory holding cost for each operation per period.

$$
\begin{array}{cccccccc}
zs_{111} & zp_{111} & zh_{111} & & & zs_{11T} & zp_{11T} & zh_{11T} \\
zs_{121} & zp_{121} & zh_{121} & \cdots & & zs_{12T} & zp_{12T} & zh_{12T} \\
. & . & . & & \cdots & . & . & . \\
. & . & . & & & . & . & . \\
zs_{1h_11} & zp_{1h_11} & zh_{1h_11} & & \cdots & zs_{1h_1T} & zp_{1h_1T} & zh_{1h_1T} \\
zs_{211} & zp_{211} & zh_{211} & & & zs_{21T} & zp_{21T} & zh_{21T} \\
. & . & . & & & . & . & . \\
. & . & . & & & . & . & . \\
zs_{1h_J1} & zp_{1h_J1} & zh_{1h_J1} & & & zs_{1h_JT} & zp_{1h_JT} & zh_{1h_JT}
\end{array}
$$

O_M_T- Machine: Eligible machine number per operation.

$$
\begin{array}{ccc}
a_{11} & & a_{1h_1} \\
. & \quad \cdots \quad & . \\
. & & . \\
. & \quad \cdots \quad & . \\
a_{J1} & & a_{Jh_J}
\end{array}
$$

O_M_T- PT: Lower and upper bound for processing time per operation.

$$
\begin{array}{cc}
p_{11}^{min} & p_{11}^{max} \\
p_{12}^{min} & p_{12}^{max} \\
. & . \\
. & . \\
. & . \\
p_{1h_1}^{min} & p_{1h_1}^{max} \\
p_{21}^{min} & p_{21}^{max} \\
. & . \\
. & . \\
. & . \\
p_{Jh_J}^{min} & p_{Jh_J}^{max}
\end{array}
$$

O_M_T- Dem: Nominal mean and standard deviation of the demand per job.

$$
\begin{matrix}
d_1 & vd_1 \\
. & . \\
. & . \\
. & . \\
d_j & vd_j \\
. & . \\
. & . \\
. & . \\
d_J & vd_J
\end{matrix}
$$

O_M_T- ST: Sequence dependent setup time.

$$
\begin{matrix}
\delta_{1111} & \delta_{1112} & & \cdots & & \delta_{11Jh_J} \\
\delta_{1211} & \delta_{1212} & \cdots & & & \delta_{12Jh_J} \\
. & . & & \cdots & & . \\
. & . & & & & . \\
\delta_{jo11} & \delta_{jo12} & & \cdots & & \delta_{joJh_J} \\
. & . & & & \cdots & . \\
. & . & & & & . \\
\delta_{Jh_J11} & \delta_{Jh_J12} & & \cdots & & \delta_{Jh_JJh_J}
\end{matrix}
$$