

## Flow-shop problems with preemption

- **maximal polynomially solvable:**

$F2|pmtn|C_{max}$  Gonzalez & Sahni (1978) [3], Cho & Sahni (1981) [1]

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- **minimal NP-hard:**

\*  $F2|chains;pmtn|C_{max}$  Lenstra (-) [4]  
\*  $F2|r_i;pmtn|C_{max}$  Gonzalez & Sahni (1978) [3], Cho & Sahni (1981) [1]  
\*  $F3|pmtn|C_{max}$  Gonzalez & Sahni (1978) [3], Cho & Sahni (1981) [1]  
\*  $F2|pmtn|L_{max}$  Gonzalez & Sahni (1978) [3], Cho & Sahni (1981) [1]  
\*  $F2|pmtn|\sum C_i$  Du & Leung (1993) [2]

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## References

- [1] Y. Cho and S. Sahni. Preemptive scheduling of independent jobs with release and due times on open, flow and job shops. *Oper. Res.*, 29(3):511–522, 1981.
- [2] J. Du and J.Y.-T. Leung. Minimizing mean flow time in two-machine open shops and flow shops. *J. Algorithms*, 14(1):24–44, 1993.
- [3] T. Gonzalez and S. Sahni. Flowshop and jobshop schedules: complexity and approximation. *Oper. Res.*, 26(1):36–52, 1978.
- [4] J.K. Lenstra. Not published.