# ENGINUITY TUTORIAL



**Completing A Job That Overruns** 



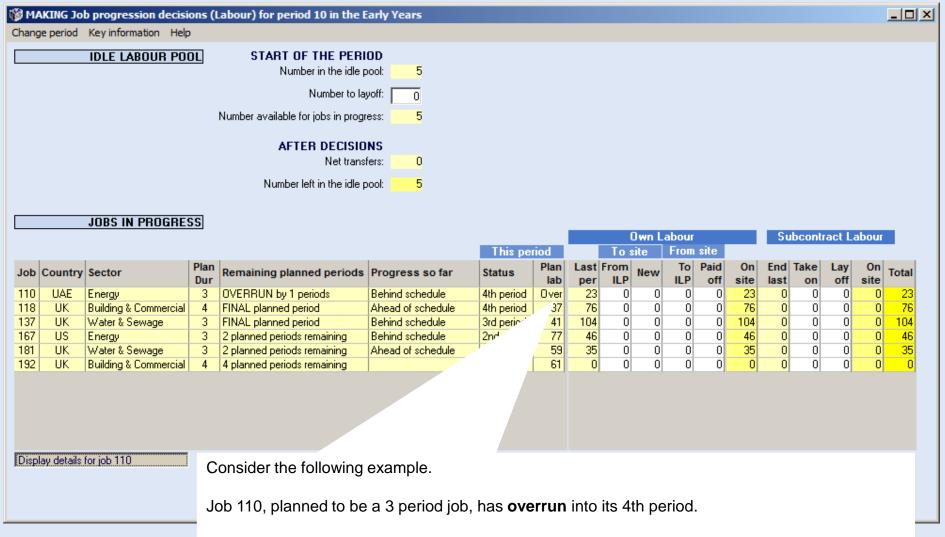
Ideally all jobs progressed will be completed either early or on time.

However, this is not always the case, and if a job overruns beyond its planned duration there are a number of affects :-

- A **penalty** will be incurred from the client for late completion, expressed as a % of the tender value for each period the job overruns. This can have a severe affect on the company's cash account, and company value.
- Additional resources will be needed to complete the job (labour, project manager), diverting them from elsewhere.
- It **reflects badly** on the industry's perception of the company, reflected in the 'contract completion' and 'client satisfaction' key performance indicators used to measure the progress of the company.

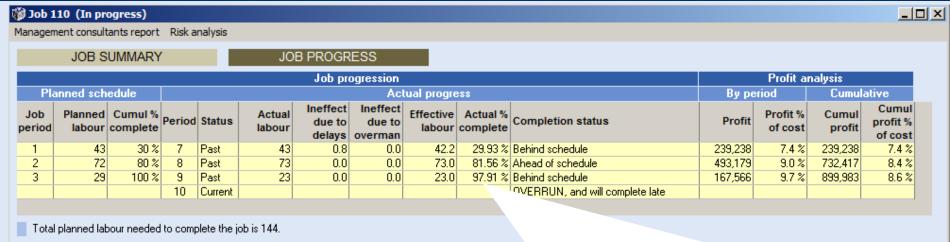
If a job overruns, it is imperative that the Construction Manager allocates enough labour to complete the job in its first overrunning period.





There are currently 23 of the company's own labour on site, but with no planned labour as a guide, what level of labour is required to complete the job this period?





The **Job progress** for the job shows that the job is currently 97.91% complete, and has overrun.

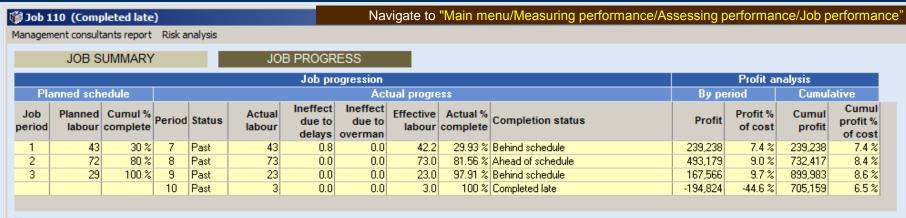
There is 2.09% of the job left to complete, or 2.09% of the total labour required for the job, 144 man periods, equating to 3 labourers (.0209 x 144).

Delays caused by risks striking are not an issue when jobs overrun, since risks will only strike during the planned duration of a job.

To ensure that the job completes 3 labourers should be allocated to the job.

If a job overruns you can allocate as much labour as is required to complete the job, and the normal overmanning rules do not apply, since there is no planned labour as a guide.





Once the period has been completed, the **Job details** shows the penalty incurred for late completion.

The penalty for completing a job late is a % of the overall tender (bid) value to be paid each period the job overruns, and varies by client.



#### IW THE DETAILS FOR EACH PERIOD THE JOB HAS BEEN PROGRESSED

	VALUE AND PROFIT ANALISIS								
	Measured value:	241,951 ?							
	Early completion bonus:	0							
181,532 _?	Total value:	241,951							
44,961 ?	Total cost:	436,775							
0	Total profit:	-194,824 (-44.6 % of costs)							
196,945									
	DDOCDECC TO DATE								

Amount of the job completed: 100 %

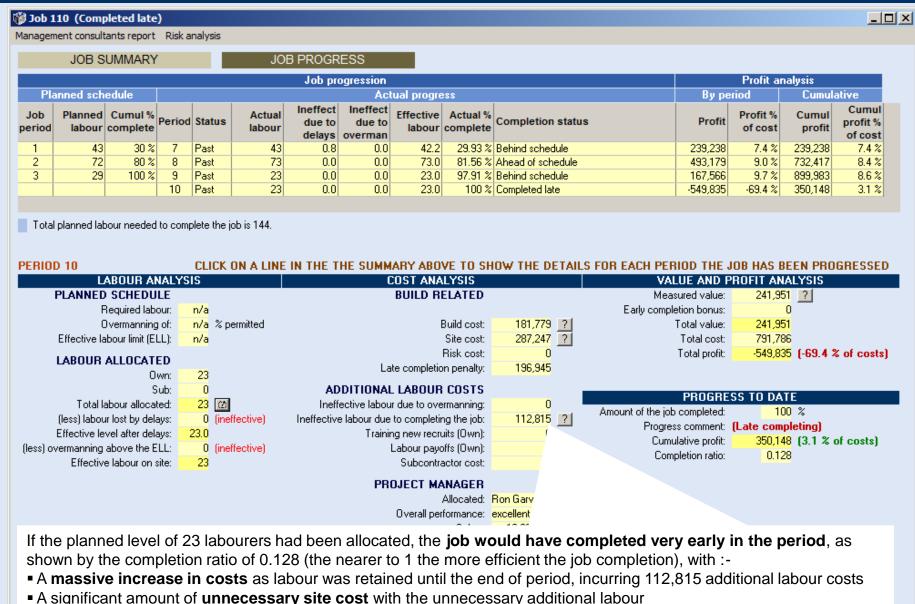
VALUE AND PROFIT ANALYSIS



337 ?

				Procurement restrictions		Payment terms			
Name	Base country	Туре	Current relationship	From period	Minimum relationship required to continue bidding	Retention	Late completion penalty	Early completion bonus	
AeroPower	United States	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.4 %	
Al Mahran Developments	United Arab Emirates	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.4 %	
American Steel Corporation	United States	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.4 %	
Amrail	United States	Public sector	satisfactory		no restriction	1.0 %	1.2 %	0.4 %	
ANZ Water	New Zealand	Private sector	satisfactory		no restriction	1.2 %	1.3 %	0.5%	
Auckland City Developments	New Zealand	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.4 %	





- Inefficient use of labour that could have been used elsewhere