

# ENGINEUITY TUTORIAL



**Retention**



## Retention

**Retention** is a % of the measured value (turnover) achieved on a job in a period that is retained by the client until the job is completed.

**Retention can have a significant affect on company cash flow.**

We will look at an example of how retention is calculated, and then repaid when the job completes.



# Retention

Job 34 (Completed on time)

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance/Job details"

Management consultants report Risk analysis

## JOB SUMMARY

## JOB PROGRESS



Period identified: 2  
Country: United Kingdom  
Location: Hunstanton  
Type: Build Only  
BIM model used: No  
Size: Small  
Approx value: 5,000,000  
Duration: 3 periods  
Description: Erect new onshore wind turbines  
Sector: Energy  
Client: Breeze Energy [Details](#)

## PROCUREMENT DETAILS

### BID SUBMITTED

Estimated build cost: 4,264,144  
Estimated site cost: 852,829  
On cost: 104,167  
Mark-up: 4.4 %  
Bid: 5,450,870 ?

### BID RESULT

**Job won**

[Tender Report](#)

### BIDDING INFORMATION

The client relationship when bid submitted: satisfactory

When progressing the job the expected value (turnover) for each man period is: 56,780

## ESTIMATED COSTS / PLANNED LABOUR SCHEDULE

Job period	Estimated build cost	Estimated site cost	Planned labour	Cost %
1	1,279,243	255,849	29	20
2	2,132,072	426,414	48	40
3	852,829	170,566	19	10
	4,264,144	852,829	96	

## RISK REGISTER

Risk description	Likelihood occurs	Impact on cost	Expected labour reduction
Personnel issues	High	29,000	2.3 %
Leaks	Medium	37,000	0 %
Poor decision making	Low	51,000	0 %
Protected wildlife found at site	Low	59,000	0 %

Job 34 is a small Energy job in the United Kingdom.

The client is Breeze Energy.



# Retention

Client information								
[ALL]				[ALL]				
Name	Base country	Type	Current relationship	Procurement restrictions		Payment terms		
				From period	Minimum relationship required to continue bidding	Retention	Late completion penalty	Early completion bonus
AeroPower	United States	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Al Mahran Developments	United Arab Emirates	Private sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
American Steel Corporation	United States	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Amrail	United States	Public sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
ANZ Water	New Zealand	Private sector	satisfactory		no restriction	1.2 %	1.3 %	0.6 %
Auckland City Developments	New Zealand	Private sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Australian Sport Institute	Australia	Public sector	satisfactory		no restriction	1.0 %	1.2 %	0.5 %
AustRoads	Australia	Public sector	No relationship		no restriction	1.0 %	1.2 %	0.5 %
Beijing Development Group	China	Public sector	satisfactory		no restriction	1.0 %	1.3 %	0.5 %
Breeze Energy	United Kingdom	Private sector	satisfactory		no restriction	1.4 %	1.6 %	0.7 %
Cane and Beet Sugars	United Kingdom	Private sector	No relationship		no restriction	0 %	1.2 %	0.5 %
Chicago City Developments	United States	Public sector	satisfactory		no restriction	0 %	1.2 %	0.5 %
Crawford Petrochemicals UK	United Kingdom	Private sector	satisfactory		no restriction	4 %	1.6 %	0.9 %
Dales Water Services	United Kingdom	Public sector	satisfactory		no restriction	2 %	1.3 %	0.6 %
Devon and Cornwall Water	United Kingdom	Public sector	No relationship		no restriction	2 %	1.3 %	0.6 %
Doha Development Group	Qatar	Private sector	satisfactory		no restriction	0 %	1.2 %	0.5 %
Dubai Holdings Plc	United Arab Emirates	Private sector	satisfactory		no restriction	0 %	1.2 %	0.5 %
East Coast Rebuild	United States	Public sector	No relationship		no restriction	0 %	1.2 %	0.5 %
East Midlands County Council	United Kingdom	Public sector	satisfactory		no restriction	0.8 %	1.0 %	0.4 %
Electragen	United Kingdom	Public sector	No relationship		no restriction	4 %	1.6 %	0.7 %
Emirates Energy	United Arab Emirates	Private sector	satisfactory		no restriction	5 %	1.7 %	0.9 %
English Waterways	United Kingdom	Public sector	satisfactory		no restriction	0 %	1.2 %	0.5 %
Fenlands County Council	United Kingdom	Public sector	poor		no restriction	0.8 %	1.0 %	0.4 %
FIFA North America 2026	United States	Public sector	fairly good		no restriction	1.5 %	1.6 %	0.7 %
First Wind USA	United States	Public sector	satisfactory		no restriction	1.4 %	1.6 %	0.8 %

## BREEZE ENERGY

Breeze Energy has over 10 years experience in on and offshore wind farm development and are tot

Europe, with a significant % based in the

Retention levels vary by client.

**Breeze Energy retain 1.4% of measured value each period.**

## KEY POINTS

Because retention levels affect company cashflow, the variation by client can affect the company's marketing strategy in deciding upon which sectors/jobs to target.



# Retention

Job performance

Management consultant report Graphical analysis

Navigate to "Main menu/Measuring performance/Assessing performance/Job performance"

ALL JOBS IDENTIFIED JOBS WON

Summary  
Risk analysis (Cost)  
Risk analysis (Delays)  
Retention analysis

Job	Country	Sector	Client	Completed	Period	Measured value	Client retention	Retention held	Retention repaid
34	United Kingdom	Energy	Breeze Energy	In period 6	4	1,964,710	1.4 %	27,506	0
					5	2,634,168	1.4 %	36,878	0
					6	851,992	1.4 %	11,928	38,156
					8			0	38,156
								76,312	76,312
49	United Kingdom	Water & Sewage	English Waterways	In period 6	5	626,822	1.0 %	6,268	0
					6	1,069,487	1.0 %	10,695	3,482
					8				3,482
									5,964
52	United Kingdom	Transport	HS Rail Connection Group	In period 7	5	2,371,956			0
					6	3,974,460			0
					7	1,385,000			0,263
									in 263

Job 34, the planned 3-period job was completed on time, and the **Retention analysis** shows that 1.4% of the measured value was retained (held) in periods 4,5 and 6, totalling 76,312.

Any retentions held are repaid in two equal instalments :-

- In the period when the job is completed
- 2 periods after the job completes

It can be seen that as expected 50% of the retention held was repaid in the period the job completed, period 6, and the other 50% was repaid two periods later in period 8.



# Retention

## Financial Performance

Navigate to "Main menu/Measuring performance/Assessing performance/Financial analysis"

Management consultants report Graphical analysis

### OPERATIONAL

### SHAREHOLDERS

### INVESTMENTS

#### Summary

Assets and liabilities

			Job performance				Company performance				Shareholders		Future outlook		
Per	Status	Year/qtr	Total value	Total cost	Gross profit	GP % cost	Overhead costs	OVH % of cost	Net operating profit	NOP % cost	Share price	Dividend % cost	Company value	Forward workload	Forward margin
1	History	2022 (Q1)	0	0	0		34,080		-31,580		0.87		4,843,420	0	0
2	History	2022 (Q2)	0	0	0		68,000		-65,829		0.99		4,665,747	11,990,650	521,455
3	History	2022 (Q3)	5,320,862	5,001,016	319,846	6.4 %	151,720	3.0 %	138,329	2.8 %	1.10	2.0 %	4,684,088	19,179,280	819,623
4	History	2022 (Q4)	12,289,370	11,951,040	338,333	2.8 %	135,000	1.1 %	169,162	1.4 %	1.09	0.9 %	4,733,826	18,970,680	790,808
5	Early Years	2023 (Q1)	9,844,018	9,518,447	325,571	3.4 %	172,690	1.8 %	127,580	1.3 %	1.14	1.1 %	4,732,459	24,031,360	1,023,725
6	Early Years	2023 (Q2)	12,253,240	11,865,780	387,460	3.3 %	174,430	1.5 %	178,807	1.5 %	1.17	1.0 %	4,776,759	33,465,260	1,405,883
7	Early Years	2023 (Q3)	16,212,540	15,455,030	757,510	4.9 %	207,380	1.3 %	446,623	2.9 %	1.33	0.8 %	5,085,848	28,047,780	1,184,132
8	Early Years	2023 (Q4)	14,633,200	14,025,150	608,054	4.3 %	222,040	1.6 %	320,247	2.3 %	1.36	1.4 %	5,184,531	30,541,970	1,214,636

#### PERIOD 8

CLICK ON A LINE IN THE THE SUMMARY ABOVE TO SHOW THE PERIOD DETAILS

#### JOB PERFORMANCE

Measured value:	14,671,130	?
Early completion bonus:	0	
(less) Retention held:	176,054	?
Retention repaid:	138,128	?
Total value:	14,623,104	
(less) Costs:	14,025,150	
<b>Gross profit:</b>	<b>597,954</b>	

#### COMPANY PERFORMANCE

(less) Overheads:	222,040	?	(1.6 % of job costs)
<b>Gross operating profit:</b>	<b>386,014</b>		
(less) Corporation tax:	62,668	?	
(plus) Credit interest:	0		
(less) Overdraft interest:	3,099	?	
<b>Net operating profit:</b>	<b>320,247</b>		(2.3 % of job costs)

#### FUTURE OUTLOOK

Forward workload:	30,541,970	?
Forward margin:	1,214,636	

Retention **affects the cashflow** of the company, and for a particular period the retention figures from all jobs progressed can be viewed in the **Financial performance**.

In the example shown, in period 8 the company's retention figures were :-

- 138,128 repaid from completed jobs
- 176,054 held from work completed from jobs progress during the period

As 37,926 more was repaid than held, it improved the cash flow of the company in period 8, with more net operating profit going into the cash account at the end of the period.