

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 | Completion % |
|------------|----------------------|---------------------|----------------|--------------|
| 1 | 1,279,243 | 255,849 | 29 | 33.33 % |
| 2 | 2,132,072 | 426,414 | 48 | 66.67 % |
| 3 | 852,829 | 170,566 | 19 | 100.00 % |
| | 4,264,144 | 852,829 | 96 | |

RISK REGISTER

| Risk description | Likelihood occurs | Impact on completion | 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 | | | | Procurement restrictions | | Payment terms | | |
|------------------------------|----------------------|----------------|----------------------|--------------------------|---|---------------|-------------------------|------------------------|
| Name | Base country | Type | Current relationship | 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 | 0.4 % | 1.6 % | 0.7 % |
| Emirates Energy | United Arab Emirates | Private sector | satisfactory | | no restriction | 0.5 % | 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 | 0.5 % | 1.6 % | 0.7 % |
| First Wind USA | United States | Public sector | satisfactory | | no restriction | 0.4 % | 1.6 % | 0.8 % |

BREEZE ENERGY
Breeze Energy has over 10 years experience in on and offshore wind farm development and are top ranked in Europe, with a significant % based in the UK.

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

Management consultant report Graphical analysis

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 |
| | | | | | | | | 6,964 | |
| 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 |
| | | | | | | | | 0,263 | |

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

| Per | Status | Year/qtr | Job performance | | | | Company performance | | | | Shareholders | | Future outlook | | |
|-----|-------------|-----------|-----------------|------------|--------------|-----------|---------------------|---------------|----------------------|------------|--------------|-----------------|----------------|------------------|----------------|
| | | | 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: | 14,633,200 | |
| (less) Costs: | 14,025,150 | |
| Gross profit: | 608,054 | |

COMPANY PERFORMANCE

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